
Academic Program Manual

TEACHING, LEARNING, & TECHNOLOGY

LEHIGH
UNIVERSITY®

COLLEGE OF EDUCATION



The academic programs in Teaching, Learning, and Technology seek to enhance education through the integration of philosophies, practices, and technologies that advance teaching and learning in diverse instructional settings. We prepare reflective educators who have a lifelong commitment to professional growth and working with diverse learners.

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General Information

This manual is provided as a guide to the Teaching, Learning, & Technology (TLT) degree programs in the College of Education at Lehigh University. It is intended as a resource for a) existing and prospective students, b) faculty, and c) others interested in learning about what we do.

What We Do

The Teaching, Learning, and Technology degree programs prepare educators for classroom and non-classroom settings through a variety of graduate-level educational experiences. All of our professional degree programs explore research-based best practices in teaching, learning, and technology and are carefully designed to integrate course work and practicum experiences, leading to Pennsylvania certification and/or a graduate certificate or degree.

Our doctoral research studies focus on the optimal design, development, and integration of innovative practice and/or instructional technologies to enhance teaching and learning in diverse settings. Program faculty and students collaborate in researching creative new approaches in a variety of instructional settings including PreK-16 classrooms, online learning environments, and informal learning situations. Each year, both faculty and students present and publish findings from their collaborative research.

Why TLT at Lehigh

The TLT's degree programs build on the strengths of Lehigh as an institution, including its high level of on-campus technology and technology services, its well-prepared and committed faculty, its talented student body, and the rich educational environment fostered by the interaction of these strengths. Our program faculty is integral to Lehigh's productive College of Education, where the research and teaching emphasis is on "translating theory to practice." U.S. News & World Report has consistently ranked the College of Education among the top 50 for the past ten years in its America's Best Graduate Schools of Education.

Students in our degree programs have consistently ranked among the best and brightest among their peers. Over 90% of our teacher certification students pass their teacher certification exams on their first attempt and are recruited by school districts throughout the country. Demand for our graduates is always high with students finding jobs in a wide range of formal and informal learning environments. Our Teaching, Learning, and Technology Ph.D. graduates are highly sought after and find jobs at top-level academic research institutions across the country.

We are committed to meeting learner needs through an innovative curriculum that engages students intellectually, situates their learning in realistic settings, and asks them to join us in a professional partnership where we work together to model best practices in the design, development, and implementation of effective, technology-enhanced teaching and learning environments. Our programs are rigorous and students acquire new skills, enhance existing ones, and apply skills to advance the field.

What We Believe

We believe that the development of a community of practice-including teachers, instructional technologists, and educational researchers-is paramount to the preparation of effective educators. TLT students who engage in collaborative activities with others who have a common interest in teaching and learning are more likely to solicit, reflect upon, and apply multiple perspectives when solving educational challenges for diverse learning environments.

We believe teaching and learning are complex, multifaceted activities that require educators to utilize effective problem-solving strategies before, during, and after interactions with learners. Our graduates use their knowledge of effective teaching and learning to make informed decisions.

We believe a technologically sound approach to teaching and learning is one that uses a wide range of devices and techniques, employing them systematically, creatively, and selectively to improve learning. Instructional technologies are more likely to succeed when their use addresses learners' needs, encourages the development of a professional community, and is grounded in sound theoretical understandings.

We believe course work is most relevant when integrated within the practical experiences of induction into a professional role. Our field experiences and partnerships allow our students to engage in teaching, research, and development activities in real educational contexts.

What It Means to Be a TLT Graduate Student at Lehigh

Graduate study differs from undergraduate work in a variety of ways. Among other things, graduate students are expected to be highly motivated and to work toward self-sufficiency in everything they do. In addition, they are expected to be highly committed

to the subject under study, in this case becoming the best educator possible or advancing knowledge in the field of education. While it may be possible in some undergraduate course to “cut” a class or skip an assignment, doing so in graduate study—where classes usually meet only once a week—can be very damaging. While it may be possible in a large undergraduate class to come to class unprepared and sit silent, graduate students are expected to keep up with assignments, read and think between class sessions, and come to class prepared to contribute.

Similarly, graduate students in TLT need to behave as professionals. This is particularly important for those who are seeking certification, since Lehigh is required by the Pennsylvania Department of Education to certify that each applicant exhibits professionalism. Professionalism involves the way in which one thinks about one's responsibilities and behavior in terms of the needs, responsibilities, and behaviors of others. It is the extent to which we show courtesy to others, regardless of our respective roles. In class settings, this means showing respect for instructors, fellow students, and the subject under study. In non-class settings, it means being sensitive to the needs of others and being someone on whom others can depend. Evidence of such professionalism includes:

- **Taking personal responsibility for what happens in the educational experience.**
 - Completing and submitting assignments on time.
 - Recognizing late submission has consequences and accepting responsibility for those consequences.
 - Carrying one's load in teamwork situations and being both cooperative and prompt in meeting responsibilities.
 - Looking at assignments in advance and clarifying any misunderstandings before assignments are due.
 - Reading assignment guidelines carefully and following them (and if fail to do so, not blaming others).
 - Recognizing that *marks* are not the same as *learning* and focusing on *learning* instead.
 - Being a reflective learner who thinks hard about how to become more active in learning and how to apply the content under study to real-world demands and situations. (Keeping a journal may provide opportunities for reflection, but it is not, in and of itself, enough. Thought is what matters most here.)
- **Being a contributing and valuable member of the learning community.**
 - Staying engaged in class and other professional settings (and avoiding distracting either fellow students or instructors; for instance, through non-related social conversations, surfing the Web, or checking email instead of participating).
 - Respecting the non-course responsibilities of both fellow students and instructors (and avoiding making undue demands on them or their time, particularly on weekends or holidays).
 - Showing up on time (or early), particularly when going out into the schools (not asking others to “cover” or wait for us)
 - Complying with all expected behaviors when in school settings, particularly those relating to treatment of students and staff.
 - Not dominating conversations or classes; being a good listener.
 - Sharing relevant experiences as appropriate, but recognizing that others have things to contribute as well.
 - Showing a willingness to participate and a desire to take on responsibility (being a strong team player).
- **Exerting a positive influence on those with whom one comes into contact.**
 - Recognizing how others differ from us and learning to value diversity and difference as highly as comparability and similarity.
 - Recognizing how different many educational settings are from university settings and taking time to learn and appreciate those differences and fit into that culture.
 - Assuming that others have things to tell and teach us and making clear that we value and appreciate such sharing.
 - Asking questions and making comments in a respectful tone of voice (to fellow students, instructors, others out in the field).
 - Allowing others to finish their thoughts; not interrupting when someone else is talking.
 - Avoiding negative or derogatory comments about the subject matter or content under discussion.
 - Avoiding sexist, racist, or denigrating comments (and thus showing sensitivity to diversity).
 - Being very careful of the tone one uses in email (a medium where messages are easily misinterpreted).

Why Academic Advising Matters

Upon admission, each student enrolled in TLT is assigned a faculty member as an academic advisor. The partnership with the advisor is critical. The advisor is an experienced professional educator and serves as a mentor to work collaboratively to help students:

- Select and sequence courses and other learning experiences,
- Recognize and comply with changing curricula and certification standards,
- Balance workload and professional responsibilities,
- Set attainable goals and identify possible career paths,
- Take advantage of all available resources.

This partnership places responsibility on both members: Students are expected to be aware of the program of study he or she is pursuing and to monitor progress toward completion, not deferring that responsibility solely to the advisor.

What Resources Are Available to Support Learning

Computers, software, high-tech classrooms, specialized data-collection devices – all are valuable, but it is not the presence of such resources that makes for a strong education. It is, instead, what one does with them, how tightly they are integrated into the educational enterprise, and to what extent their use enables faculty and students to do more, to do better, and to enhance learning that makes them important.

At Lehigh, we never mistake the resource for its application. We strive to help our students learn the best uses of resources and to incorporate such uses in their own teaching. Of course, it is easier to learn to use resources when rich resources are available and their use is modeled well. Among the resources available to TLT faculty and students are:

- Access to the Internet both from campus and home (including a Lehigh email account)
- Access to library resources both on-campus and off-campus
- Wireless access throughout most of Iacocca Hall and many other places on campus.
- An extensive collection of K-12 curricular materials in the Fairchild-Martindale Library on lower campus
- Access to many education journals in both print and online formats through the Lehigh libraries
- Digital video cameras
- Digital still cameras
- Digital video editing software
- Web site-development software
- Hypermedia and concept-mapping software
- Scanner and capture software for converting print documents to PDF files
- Graphics software
- A variety of technology-equipped classrooms across campus
- A state-of-the-art high-tech classroom (E104: The Classroom of the Future) in which to observe the use of technology and in which to test out different teaching configurations using technology
- A fully equipped Apple Macintosh computer lab (E106)
- Numerous Windows computer labs across campus
- A common TLT Blackboard site, *NEXUS TLT*, that 1) houses information about the program, 2) facilitates email communication among and between students and faculty, 3), provides access to valuable educational resources, 4) maintains a calendar of important program deadlines and announces those deadlines by email to all affected students, and 5) provides job announcements.
- A streaming video site housing a wide range of useful videos that may be used in courses and then reviewed once out in the field teaching.

As noted above, however, having lots of technology available is not the same as making good use of it. In TLT we use technology to enhance the ways in which we help our students attain educational goals.

When Courses Meet (and other useful course-related information)

TLT courses typically are offered Monday through Thursday. Classes usually meet once per week, for three hours per meeting. In summer sessions, classes meet twice a week or may be offered in week-long workshop formats. Meeting times typically are 4-7 pm or 7-10 pm, although some classes offered to our 5th year and minor students are offered earlier in the day. Most courses are

offered at least once per year, with courses required across multiple degree programs generally offered twice a year. College-level requirements (such as *Research and Diversity and Multicultural Perspectives*) typically are offered every semester.

The College of Education maintains an updated course schedule online at:

<http://coe.lehigh.edu/admissions> (follow the links to “course listings and registration”)

In order for an offered course to actually be held (or “make”), at least 8 students must register for it.

Class sizes vary, but the typical TLT course has approximately 16 students per section.

Some courses require prerequisites or co-requisites. It is important to spot these courses and make certain you take them in the appropriate sequence. Still other courses [such as *Pre-Professional Seminar (Participation in Teaching)* and *Intern Teaching*] have deadlines for submission of application/intention forms and students who fail to submit by that date will not be enrolled. Failure to take courses in sequence or to submit the proper forms on time can delay a student’s progress by as much as a year, depending on the course. This is one reason why consultation with the advisor each semester is so important. Students are expected, however, to monitor their progress and to work toward self-sufficiency as they complete their programs.

Lehigh University is a PA Department of Education Act 48 provider.

Where to Find the Most Up-to-date TLT Information

TLT maintains a Moodle CourseSite site called “The NEXUS” for communication and sharing among TLT students and faculty. Faculty and enrolled students use their university IDs and passwords to enter this site. Information about how to access CourseSite will be provided to you in your first course with us.

LEHIGH UNIVERSITY NON-DISCRIMINATION STATEMENT

Lehigh University seeks talented faculty, staff, and students from diverse backgrounds. Lehigh University does not discriminate on the basis of age, color, disability, gender, gender identity, marital status, national or ethnic origin, race, religion, sexual orientation, or veteran status in any area, including: student admissions; scholarship or loan awards; athletic, co-curricular, recreational, or social programs; academic programs, policies, or activities; and employment and employment development. Questions and complaints about this policy should be directed to: The Provost or The Vice President for Finance and Administration, Alumni Memorial Building, Lehigh University, Bethlehem, PA 18015.

ADVERSE WEATHER POLICIES

Closing the University/Delaying Opening: If weather conditions become hazardous overnight, a determination will be made by 6:30 a.m. as to whether or not a change in the opening of the university will be made. Please dial **610-758-NEWS** (610-758-6397) or listen to your local TV/radio stations for the latest update.

RADIO: Updates will be broadcast on the following stations.

AM STATION	FREQUENCY	FM STATION	FREQUENCY
WAEB	790 AM	WLVR	91.3 FM
WEST	1400 AM	WZZO	95.1 FM
		WLEV & WCTO	96.1 FM
		WODE	99.9 FM
		WFMZ	100.7 FM
		B104	104.1 FM

TELEVISION: Updates will appear on WFMZ-TV Channel 69

Parking Regulations for Snow Emergencies: “Snow Emergency” regulations are automatically in effect when the official accumulation of snow for the Bethlehem area reaches one inch. “Snow Emergency” regulations remain in effect until 7:30 a.m. on the third day following the end of the snowstorm, unless canceled earlier. You may contact the Lehigh Police to determine if a “Snow Emergency” is in effect. The regulations that follow apply to ALL members of the Lehigh Community including students, faculty, staff, guests and visitors, etc.

1. Prohibited parking regulations will be strictly enforced. Violations during periods of snow emergencies carry a minimum fine of \$25.
2. Parking is prohibited on the lower campus for any reason between the hours of midnight and 7:30 a.m. unless otherwise posted.
3. If classes are canceled and the university is officially closed, parking is prohibited on the lower campus until 7:30 a.m. on the day following the closing.
4. Parking is prohibited on the lower campus from 5:00 p.m. Friday through 7:30 a.m. Monday.
5. In addition to the above, it may be necessary to temporarily close lots at other times or to temporarily close additional lots. When this occurs, lots or areas must be vacated according to the posted snow emergency signs that specify a temporary parking area.
6. It is the responsibility of the individual to ascertain whether the snow emergency regulations are in effect. Violators will be towed at their own expense.

During and immediately following heavy snowstorms and drifting snow, crews work around the clock trying to keep roads open and parking areas clear. Stranded and improperly parked cars make it impossible to complete this work in a timely fashion; therefore, compliance with snow emergency regulations and the complete cooperation of everyone is vital. Remember, campus safety depends upon your cooperation.

Excusing Student Absences When Buses Are Not Operating: As noted under the *University Policy on Handling Adverse Weather*, the Provost issues decisions on whether or not the university will remain open during adverse weather. On rare occasions when the university remains open in adverse weather, Lehigh buses may, however, cease to run, preventing some students from attending class. In such cases, the absences of these students are to be excused and they are to be given extensions for submission of assignments or completion of quizzes, tests or exams they missed by their absence.

The most up-to-date information on bus stoppages can be obtained by calling 610-758-1700 or by going online to: <http://www.lehigh.edu/~inubs/parking/routes.shtml>. After 4:30 p.m. this website is not updated until the next day.

Instructor Decisions on Cancelling Classes in Adverse Weather: The majority of College of Education classes meet on Mountaintop campus and, when there is adverse weather, conditions on Mountaintop can often be more treacherous than on lower campus, particularly in winter, when Mountaintop's slightly lower temperatures are more prone to produce icing. This problem may be further complicated by the fact that COE classes typically meet from 4:00-7:00 p.m. or 7:00-10:00 p.m., when plummeting winter temperatures or snow accumulations can produce increasingly dangerous driving conditions as the evening progresses.

There may be instances in which the university remains open, but instructors and students become concerned about personal safety. Instructors may find themselves fielding inquiries about whether COE evening classes are to be held under the conditions described above. And, since many students in COE graduate courses commute from some distance to reach campus, such inquiries may begin in mid-afternoon. In addition, conditions along the routes these students must drive may be substantially worse than the conditions on campus.

Clearly, instructors should meet their classes whenever possible, particularly when the provost has decided the university will remain open during adverse weather. That said, instructors and students are expected to behave rationally, including acting in responsible ways in terms of personal safety. If, in the judgment of a course instructor, weather conditions are so serious as to put the safety of the instructor or his/her students at great risk, the instructor may cancel a class. The expectation is that instructors will then reschedule the missed class for an alternate date.

Further, an instructor may say to his/her students that they should use their best judgment about the risk in coming to class under such conditions and decide accordingly. When an instructor has provided students with the ability to make such a judgment, he or she should then honor whatever decision the student makes, without penalizing that student in any way. This may entail rescheduling class presentations, providing extensions to course deadlines involving class activities, or otherwise modifying sequences or requirements to accommodate that absence.

Policies

ACADEMIC SCHOLARSHIP REQUIREMENTS FOR COE DEGREE PROGRAMS

The standards below represent the academic performance standards required by all degree programs in the College of Education.

Associate Status Students: will be placed on probation when they receive their *first* final course mark below B- and will be dismissed for poor scholarship at the end of any semester in which they are assigned a *second* final course mark below B-. Once on probation, associate students remain on probation until they are granted regular status or receive the degree.

If an associate student is assigned two final course marks below a B- in the same semester, that student will be dismissed for poor scholarship without first being placed on probation. Receiving a final course mark below C- will also result in the associate student being dismissed for poor scholarship without being first placed on probation.

Associate status students must petition to assume regular status once they have completed 9 credits of coursework numbered 200 or above. Students who are eligible to be granted regular status but fail to apply after completing 9 credits will be evaluated according to the criteria that apply to regular status students (below).

Regular Status Students: will be placed on probation at the end of any semester in which they receive their *second* final course mark below B-. Students receiving *three* final course marks below B- will be dismissed for poor scholarship.

Academic Probation: Students placed on academic probation must submit a proposed academic improvement plan to their academic advisors. That plan must include an explanation of why the student received final course marks below B- and must offer a specific plan to address in future coursework the cause of such inadequate academic performance. This plan must be approved by the program faculty. Once regular status students are placed on probation, they remain on probation until completing the degree.

Readmission: Graduate students who have been dismissed for poor scholarship are ineligible to register for coursework in the program. After one semester away, such students may petition for readmission. The program and the dean's office must approve the petition. Students whose petitions are granted will be readmitted on probation and will be dismissed permanently if they receive any additional final course mark below B-.

No final course mark lower than C- may be counted toward a graduate degree and pass-fail registration is not allowed for graduate students.

COLLEGE POLICY ON ADEQUATE ACADEMIC PROGRESS

The College of Education employs more stringent academic standards than the university for academic performance of graduate students (see <http://www.lehigh.edu/coursecatalog/admission-to-graduate-study.html>). Students failing to meet those standards will be placed on *probation* or *dismissed for poor scholarship*. In addition, graduate students in the College of Education (COE) must also continue to make *adequate academic progress*. Adequate progress is expected of students seeking degrees, non-degree students taking focused coursework toward subsequent admission to an academic program or toward external certification, and students seeking a Lehigh University post-baccalaureate certificate.

To assure graduate students in COE academic programs make necessary academic progress in those programs, faculty of the program in which a student is enrolled may review that student's progress. If, in the judgment of the program faculty, a student is not making adequate progress, by majority vote of the voting program faculty, they may either bar that student from registering for further coursework in the COE until he or she demonstrates adequate progress by completing specified actions, or drop that student from the program for *inadequate academic progress*. In cases where a student is non-degree, such a vote to drop shall have the effect of barring that student from taking further coursework in that academic program unless (1) that student is subsequently admitted to a COE academic program *and* (2) such coursework is required by the student's subsequent program of study.

Events that may trigger such an adequate progress review include:

- A graduate student carrying two or more incompletes in non-research courses,
- A graduate student withdrawing from the same course more than once,
- A graduate student withdrawing from more than three required courses in a program of study,
- A graduate student failing to complete non-course program requirements in a timely fashion,
- Any COE faculty member or instructor requesting such a review.

In addition, some COE academic programs mandate periodic reviews of the academic progress of all students in those programs and these reviews shall take place without the necessity of a triggering event.

In making decisions about adequate progress, program faculty shall take into consideration a student's personal health and/or life situation. To assist in such consideration, program directors may request that students clarify the reasons behind their failure to make adequate academic progress.

Right of Appeal: Students have the right of appeal if they feel academic program faculty have erred in (1) barring them from further coursework in the COE until completing some specified indicator(s) of adequate academic progress, (2) dropping them from the program in which they were enrolled, or (3) barring them from taking non-degree coursework in that academic program. Such students should follow the appeal process laid out in the *College of Education Grievances Procedures*, detailed elsewhere in this handbook. The form to use for appeals of sanctions related to *adequate progress* decisions is the *Non-course-related Grievance Form* (available online through this link: [COE_NonCourseRelatedGrievanceForm.pdf](#)).

COLLEGE ACADEMIC INTEGRITY POLICY

The Faculty of the College of Education is committed to upholding the highest standards of personal, professional, and academic integrity. Thus, each graduate student, graduate assistant, or research assistant in the College of Education is expected to act in accordance with the university's Student Code of Conduct and the standards set by the university faculty. Further, each student is expected to act in accordance with the professional standards set forth by his or her field of study (for example, the Pennsylvania Department of Education and the American Psychological Association).

The faculty will not tolerate acts of plagiarism, cheating, data falsification and other forms of academic misconduct. Using the appropriate procedure, the faculty will send suspected cases of academic dishonesty to the Office of Student Conduct and Community Expectations to initiate a fair process for resolving alleged misconduct.

Students found responsible under the Student Code of Conduct for specific charges of academic misconduct will not be eligible to receive a university recommendation for professional licensure or certification. While this ineligibility might not prevent such students from completing the coursework for a degree and receiving that degree, it would eliminate their ability to achieve certification or licensure.

Process for Resolving Suspected Student Academic Misconduct under the Policy

The COE has its own procedures for attempting informal resolution of suspected academic misconduct, procedures that are aligned with the university's process. For those procedures and relevant forms, please see this link: [COE_StudAcadMisconductResolveGuide.pdf](#)

TERMINATION OF STUDENT STATUS

The student status of students enrolled in the College of Education (COE) may be terminated for seven reasons:

1. *Voluntary Termination:* A student notifies the university, through academic advisers, program directors or other university officials, that he/she wishes to discontinue pursue of studies.
2. *Inadequate Academic Progress:* If, in the judgment of the program faculty, a student has failed to meet the expectations of the program in terms of making adequate academic progress, as defined by the College of Education's *Adequate Academic Progress Policy* (see below), that student may be dropped from the program.
3. *Failure to Meet Program Standards/Requirements:* Selected degree programs in the COE have periodic reviews of student performance and behavior. If, in the judgment of the program's voting faculty, a student has failed to meet the expectations/requirements of the program, that student may be dropped from the program. Such expectations/requirements include both course-related and non-course-related performances and behaviors.
4. *Dismissal for Poor Scholarship:* Regularly admitted students in degree programs who fail to meet the COE's *Academic Performance Standards Policy* will be dismissed from the college.
5. *Disciplinary Dismissal:* Students who undergo a disciplinary review in which they are found responsible, may have their student status terminated (see <http://www.lehigh.edu/~indost/conduct/handbook/sect6.shtml>). The COE has its own procedures for attempting informal resolution of suspected academic misconduct ([COE_StudAcadMisconductResolveGuide.pdf](#)), procedures aligned with the university's process.
6. *Certification/Licensure Program Termination:* A student in a program leading to external certification or licensure who is found to have violated the COE *Academic Integrity Policy* will no longer be eligible to pursue such certification and licensure, although he or she may be eligible to complete a degree program that does not include such certification/licensure. Similarly, if, in the judgment of the voting program faculty, a student seeking certification is not suited to further pursuit of that certification (as might happen in programs that prepare school teachers, administrators, counselors and psychologists), that student will be offered the option of completing a degree without certification. This latter instance most frequently occurs when that student

has failed to succeed in one of more field placements and/or has demonstrated temperamental/emotional issues causing concern about recommending to the certifying/licensing agency that the student be granted certified/licensed.

7. *Termination of Doctoral Studies:* A student that fails either the Doctoral Qualifying Examination or the Doctoral General Examination, does not garner approval for the dissertation proposal, or ultimately fails to defend his/her dissertation successfully will no longer be eligible to pursue doctoral studies (see <http://www.lehigh.edu/coursecatalog/degree-information.html>). In such cases, the student may be offered, instead, the opportunity to receive a master's degree, through meeting its requirements.

The college and university have appropriate appeal processes designed to assure students have access to due process. For details of those processes, please see the College of Education *Grievance Procedures* section elsewhere in this manual.

LEHIGH UNIVERSITY GRADUATE PETITIONS

Students wishing to petition, use the official university *Graduate Petition* form (available online at: https://coe.lehigh.edu/sites/coe.lehigh.edu/files/LU_GradStudentPetitionForm.pdf).

This PDF document allows the petitioner to check various types of requests, or check OTHER and then describe his or her request in 50 words or less. The petitioner has approximately 200 words to describe the reason(s) why what he or she has requested should be granted. Once again, the petitioner enters this text directly into the PDF form. Alternatively, the petitioner may prepare the text in a word-processing document and then cut-and-paste the text from that document. If the petitioner needs more than 200 words, he or she may note that fact on the form and then print out an additional page and attach it.

Whenever possible, however, the petitioner should make his or her *very best* effort to use the PDF and not attach additional pages. This environmentally conscious approach not only reduces use of paper, it is also more efficient.

The petitioner may save the form to his or her computer and complete it in several sessions. Once the petitioner has completed the form, he or she prints out a copy for distribution to obtain the necessary signatures and recommendations.

The *Graduate Petition* form notes the exact nature of required documentation and the petitioner, as well as those faculty and administrators who subsequently consider the petition, should be certain to include that required documentation. Otherwise, the petition will likely be tabled until such documentation is provided. This will delay a petition by at least two weeks and can lead to a petition being denied for lack of documentation if that documentation is not provided in a timely fashion after the petition is tabled.

Faculty may attach additional printed pages to make clear why they support or oppose the petitioner's request. Each faculty or administrative signer must either recommend *approve* or *deny*. Signers are, however, allowed in their comments to make clear any reservations they have in supporting the petitioner.

Petition-consideration Process

1. A student obtains a petition form and (1) checks the appropriate boxes for what action he/she wants taken ["I respectfully request: ..."] **and** (2) enters text telling why that action is more appropriate than the action already taken ["Reasons: ..."]. The student fills out the top of the petition, entering contact information, prints the form and then signs and dates it.
2. The signed form then goes to the student's academic adviser. That adviser reviews the petition, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
3. The doubly signed form goes next to the graduate coordinator who reviews the petition and any attachments, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
4. The triply signed form next goes to the department chair who reviews the petition and any attachments, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
5. Now carrying four signatures, the petition form goes to the dean's office where the associate dean reviews the petition and any attachments, makes a recommendation ["Approve," "Deny" or "Defer to SOGS"], provides any justification for his/her recommendation and then signs and dates the form. [Associate deans recommend "Defer to SOGS" when they feel there may be cross-college issues that should be discussed before making a recommendation.]

6. The petition leaves the college at this point and goes down to the registrar's office. The registrar reviews the petition and any attachments, checks the student's record for any additional relevant information, and determines if the petition is covered by a recent precedent by the Committee on the Standing of Graduate Students (SOGS). If so, the registrar acts on the petition based on that precedent. If not, the registrar distributes the petition electronically to all members of SOGS and schedules it for discussion at the next SOGS meeting.
7. The SOGS committee meets every other week, including some meetings in the summer, and typically considers between four and 12 petitions at each meeting. Each petition is discussed and carefully considered and the committee votes to *approve*, *deny*, or *table* the petition.
8. If a petition is tabled, the graduate associate dean from the petitioner's college notifies the department/program of that fact and requests the missing documentation. A petition may remain on the table for *no more than two meetings*; if the requested documentation has not been supplied by then, the petition is automatically denied.
9. If the committee decides to *approve* or *deny* the petition, the registrar's office notifies the petitioner of the decision of the committee.
10. If a petitioner is not satisfied with this decision, he or she may appeal to the Graduate and Research Committee (GRC). This appeal should be in the form of a letter to the GRC that the student delivers to the chair of the GRC. In this letter, the student should make clear (1) what action he or she wishes taken instead of the action taken by SOGS, (2) why the action taken by SOGS was inappropriate, and (3) why the requested action is the more appropriate action. For more details, visit: <http://www.lehigh.edu/~indost/conduct/handbook/sect4.shtml>
11. The GRC as a whole considers the student's appeal and issues its decision.

TLT School Placement Clearances Policy

Per the Pennsylvania Department of Education, all Teaching, Learning, and Technology students who come into contact with children either through field-based or research experience in school settings must obtain and present to the Coordinator of the Office of Teacher Certification (OTC, Iacocca A108) the following up-to-date (not more than one year old) clearances upon matriculation into their academic program:

- **FBI Federal Criminal History Record** (Act 114): Information about how to obtain your FBI clearance is available at http://www.pa.cogentid.com/PDE_Main.html. Upon registering for the fingerprint check, you will be assigned a secure registration ID# that you must supply to the OTC Coordinator so that we can access your FBI clearance online. You will not be able to access your records online yourself, so be sure to pay the additional fee for an "unofficial" paper copy of your FBI clearance so that you will have access to your report and have some proof that you were fingerprinted.
Additionally, please be sure to request that your FBI records are processed through the Pennsylvania Department of Education (PDE) NOT the Department of Public Welfare (DPW) or the Department of Banking (DOB).
- **Pennsylvania State Police Criminal Records Check** (Act 34): Request your record through the PATCH system found at: <https://epatch.state.pa.us/Home.jsp>
- **Pennsylvania Child Abuse History Clearance** (Act 151): Forms available from the OTC Coordinator; additional information found at <http://www.dpw.state.pa.us/partnersproviders/childwelfare/003671038.htm>
- **Mantoux Tuberculosis Screening** or the results of a chest X-ray: For students' convenience, Lehigh's Health Center holds TB Clinics in December and May of each year for a nominal fee. For more information and to schedule an appointment, call 610-758-3870. If you choose not to use the Health Center, we will need signed documentation from your doctor that indicates the results of your test.

After obtaining your clearances, bring your FBI secure registration ID# and all original documents to the OTC Coordinator (Iacocca A108) so we can make copies for our records.

Before any student will be permitted to register for any course with a field experience component or initiate a research activity that involves school-based contact with children, they must have updated clearances on file with OTC. If clearances are not current, the student's registration and/or field placement will be delayed until updated documentation is on file with the Office of Teacher Certification. If anything other than "negative" or "no record exists" is reported on a student's documentation, the exact nature of the reported health or criminal record issue will be reviewed by the OTC Director in accordance with the *College of Education Policy on Clearances*. Depending on the outcome of that review, the student may not be placed in field or research experiences until all documentation is clear. If any action is needed in response to any clearance check, that action is solely the responsibility of the student, not the College of Education faculty or staff.

It is the student's responsibility to keep clearance documents current by obtaining annual updates throughout his/her academic program and presenting originals to the OTC Coordinator upon receipt for verification and copying. Neither the OTC Coordinator nor the TLT Program notifies students when their clearances are about to expire.

Be sure to store your original clearance documents in a secure location and to keep them with you at all times when dealing with children. The schools are mandated by PDE to check original clearances for anyone entering the building likely to be in direct contact with children. Lehigh students must have up-to-date (not more than one year old), original documents available for school administrators upon request during all field assignments. Failure to produce documentation upon request will result in removal from the schools. The OTC is not permitted to replace lost clearances and will not supply copies on your behalf to the schools.

Decisions to admit students into public school practicum or internship placements are solely the purview of school districts. The department and/or TLT Program does not debate the merits of any school district decision in relation to clearance check results. If a student is arrested during his/her field placement or research experience, the TLT Program Director will remove the student from the field placement or research experience pending dispensation of the arrest incident.

Any questions that Teaching, Learning, and Technology students have about the Pennsylvania Department of Education's clearances policies should be directed to: TLT Program Director, Lehigh University, College of Education, 111 Research Drive, Iacocca Hall, A109, Bethlehem, PA 18015. Email: tltprogram@lehigh.edu Phone: (610) 758-3230.

Financial Aid

Financial support for graduate students is somewhat limited. In general, scholarships/fellowships and graduate assistantships go to graduate students who are continuing their studies with us. That is, it is extremely rare that an incoming graduate student would receive such support. Because our degree programs are all graduate, we have no teaching assistantships.

Students who have been admitted to the program may apply for scholarship support for either fall or spring semester or for summer (beginning in May). Applications must be filed with the TLT Program Coordinator no later than January of each year. A special committee ranks the applications and the TLT Program Director forwards those recommendations to the Department Chairperson. Departmental graduate assistantships, fellowships, and scholarships are made by the Chairperson of the Department of Education and Human Services, as well as by the Dean of the College of Education.

Students may find support through externally funded projects (such as grants and contracts). The TLT program does not hire such students, however, instead they are hired by the director of the funded project (usually a faculty member). To be considered for such position, the interested student must have the skills and experiences the project requires.

In addition, there are other graduate assistantships and employment opportunities available across the Lehigh University campus.

For information about financial aid in the form of loans, please contact the Office of Financial Aid, 218 W. Packer Ave. (610-758-3181).

TRANSFER CREDITS

The College of Education has adopted a more restrictive policy on transfer of credits than has been approved by the university. Such policy is permitted by R & P 3.22.2.

With the approval of the department chair offering commensurate courses and the student's department chair (if different), a maximum of six credits may be transferred from another university to a Lehigh master's program.

Students must complete a *course transfer petition* (available online at <http://coe.lehigh.edu/content/current-student-information>) and see that it receives the necessary signatures and is submitted to the Registrar, along with course descriptions and an official transcript. Students may also be asked for a statement from their former institution to confirm that the course has not been used toward a prior degree.

To be eligible for credit towards a Lehigh *master's* program, all transferred courses must:

1. Have been taken at the graduate level
2. Be one in which the student received a final mark of B or better
3. Not have been used toward any prior degree
4. Have been completed within four years of first enrollment into a Lehigh graduate program
5. Be transferred from an institution that is accredited by one of the six regional accrediting associations.

Lehigh University does NOT permit the transfer of coursework into *doctoral* programs.

Transfer Credits within the Five-year Teacher-certification Program: Graduate students who were undergraduates admitted to the five-year program are covered under a special policy and may petition to transfer up to 12 credits of completed Lehigh coursework taken while they were undergraduates, provided those courses meet ALL the criteria listed below.

To be eligible for transfer toward a teacher-preparation master's degree each course must:

1. Not have been applied toward the Lehigh undergraduate degree.
2. Have been reserved for application to the graduate degree through completion of the required form.
3. Be a course in the program of study for that master's degree.
4. Be one in which the student received a final course mark of B- or better.

NOTE: Students do NOT need to petition to apply courses toward meeting the requirements of certification, since there is no requirement that such courses be part of a degree program.

Teacher Education Internships: Requirements and Eligibility

This policy covers the requirements and eligibility for field-based “internship” placements for all teacher candidates in both the Special Education and the Teaching, Learning, and Technology Programs. For purposes of this policy, *teacher-education internships* (referred to as “internship” in the rest of this document) include the following:

- the student teaching placement for initial certification at all levels, and
- the intern placement (sometimes called “field experience”) for already-certified teachers seeking additional certification at all levels (both general and special education).

Internship Requirements

All teacher candidates seeking initial certification must complete a 14-week, full-time “student teaching” experience in a public school or Pennsylvania-approved, publicly funded private school. Teacher candidates who are seeking dual certification in general education and special education will be placed in two consecutive 7-week placements (one in general education and one in special education).

Teacher candidates seeking initial certification at the secondary level will also complete a pre-professional placement *prior* to student teaching. Already certified teachers seeking additional certification also complete an 8-week intern placement (also called “field experience”) in an appropriate setting. Although the pre-professional and additional certification placements are not described as “student teaching,” the procedures for teacher-education internships described below apply to such placements as well.

Application

Teacher candidates must complete an application for all internships. Applications for the student teaching and intern placements (see definitions at the beginning of this document) can be obtained from the Office of Teacher Certification. Completed and signed applications must be submitted to the Office of Teacher Certification by the deadlines listed, below:

Spring Placement: First Friday of previous September

Fall Placement: Last Friday of previous January

These deadlines are firm and applications must be complete. If your application is not received on time, you will not be considered for an internship placement.

Eligibility for Internship

Eligibility for internship requires (1) completion of, and adequate performance in, all required coursework; (2) demonstrated professionalism; and (3) formal approval by the appropriate program faculty. In order to be considered for placement, a teacher candidate must attain all three.

Coursework. All coursework required for certification must be completed prior to internship. Interns are not permitted to take courses (either at Lehigh or elsewhere) during internship. In addition, teacher candidates must have a final course grade of B- or better in all coursework required for certification. Candidates who receive a final course grade below B- will be required to re-take that course before being eligible for internship. Teacher candidates are permitted to re-take a course only one time. If candidates do not receive a grade of B- or better the second time a course is taken, they will not be eligible for internship. In addition, some courses require that the teacher candidate complete a culminating project. Candidates must receive a B- or better on the project to be eligible for internship. Students who do not receive a B- or better on the project may be asked to re-take the course.

Professionalism. In addition to coursework, internship eligibility requires demonstration of professionalism. The Pennsylvania Code of Professional Conduct and Practice for Educators (<http://www.pacode.com/secure/data/022/chapter235/chap235toc.html>) describes professional conduct and practice for teachers. Throughout the program and prior to internship, potential interns must have demonstrated that they are able to exhibit professional behaviors aligned with the Code.

Clearances: All teacher education students are expected to submit current (no more than 1-year-old) clearances upon matriculation into coursework and keep them current throughout their program. Prior to internship placement, all teacher candidates must have updated clearances. If clearances are not current, internship placement will be delayed until updated documentation is on file with the Office of Teacher Certification. If anything other than "negative" or "no record exists" is reported on a student's documentation, the exact nature of the reported health or criminal record issue will be reviewed by the OTC Director in accordance with the *College of Education Policy on Clearances*. Depending on the outcome of that review, the student may not be placed in field or research experiences until all documentation is clear. If any action is needed in response to any clearance check, that action is solely the responsibility of the student, not the College of Education faculty or staff.

Faculty Approval. Assignment to a teaching internship is not automatic. The three conditions above are necessary, but not sufficient. Teacher candidates who make application for internship and meet the above conditions will be brought forward for consideration by the appropriate teacher education faculty (General Education faculty, Special Education faculty, or both Special Education and General Education faculties for dual certification). The program faculty will consider the candidate's request and vote on whether they believe the teacher candidate is ready for internship. A majority of the appropriate teacher education faculty must vote in favor of approval. If the faculty question the teacher candidate's academic skills—regardless of his or her course marks or the candidate's professionalism, or they are uncertain whether the candidate is ready temperamentally or emotionally for the demands of internship, the program faculty may vote to delay internship or to counsel the candidate to pursue paths other than professional certification. Regardless, approvals of placements for internship are based on the program faculty's perception of the preparedness and suitability of the candidate for teaching, since they must consider the well being of children who will be the candidate's students during internship and the faculty will be asked ultimately to recommend the candidate for teacher certification.

Teacher candidates who have previously been pulled from internship (see *Termination of Internship* below) are not eligible to repeat internship. Students who were unable to complete internship for reasons other than termination (see *Deferment of Internship* below) are eligible to be reconsidered for placement in internship, but must first be reapproved by the faculty following these same procedures in order to restart internship.

Internship Placement Decision Appeal Process

Teacher candidates who fail to receive program faculty approval for internship may appeal the program faculty decision using the *Course-related Non-Grade Grievance* process (see the *Grievances* sections of the Special Education/TLT Program Manuals or the Education and Human Services Department Manual).

School Placement

In order for Lehigh personnel to provide adequate supervision, interns are placed in area schools within a 30-mile radius of Lehigh University. Teacher candidates may request a specific site or type of site, which we will do our best to accommodate; however, the Office of Teacher Certification and Lehigh faculty make the final decision on internship site, based on a number of factors. In particular, the site must meet Lehigh University qualifications with respect to type of placement and credentials/experience of supervising teachers.

Expectations During Internship

Given that student teaching internships (and field experiences leading to additional certification) require the full-time efforts, interns should consider the internship the equivalent of full-time employment.

Under the direction of their mentor teacher and Lehigh supervisor, interns assume varying levels of full-time teaching responsibility. For those doing the student teaching internship, full-time teaching responsibilities include planning and preparation, maintaining a positive classroom environment, delivering sound instruction, and attending to all required out-of-class functions of teachers in the school setting. They also include attending Back-to-School Night, parent-teacher conferences, and other school activities. Interns are expected to acclimate themselves to the total school program and exhibit characteristics of professional educators as outlined in the Pennsylvania's Code of Professional Practice and Conduct for Educators (<http://www.pacode.com/secure/data/022/chapter235/chap235toc.html>). Specifically, all interns should exhibit professional behavior, including wearing attire appropriate for a school setting; arriving and leaving promptly at designated times; interacting with school personnel in a productive, and collegial and appropriate manner; completing competencies as designated; responding appropriately to feedback; and engaging in ethical practices as outlined in the Code.

Absences/Missed Days

Interns are expected to spend all day in the school during their internship. If serious illness or family emergencies cause interns to miss days, they must notify their mentor teachers and supervisors immediately and will be expected to make up these days. The intent is to complete an intensive internship similar to what real teachers experience on a daily basis. Interns must follow the school district's calendar, not Lehigh's academic calendar (this includes Spring Break and other holiday breaks).

Assessment of Performance

Interns will be evaluated on their instructional skill, classroom/behavior management and professionalism during their internship placement, based on the Pennsylvania Department of Education's PDE 430 evaluation. Interns will be assessed by university supervisors and those in student teaching internships will be directly observed by university supervisors a minimum of three times during internship. Prior to those observations, interns will be asked to provide lesson plans and other materials for supervisor use during observations. In addition, university supervisors will obtain feedback from mentor (cooperating) teachers on the intern's instructional skill, classroom/behavior management, and professionalism, as well as obtaining any other information related to the intern's performance as a teacher and suitability for teacher certification. These data will be used as a basis for deciding (1) whether the intern's performance is satisfactory and, if not, what action should be taken; (2) what final mark to assign for the course associated with the internship; and (3) whether to recommend the candidate for teacher certification.

Performance Problems During Internship

If an intern's performance during internship is not satisfactory, there are two possible courses of action: (1) If, in the judgment of the university supervisor and mentor teacher, the intern is capable of remediating his/her performance deficits, they will develop and implement a remediation plan; (2) If, however, in the judgment of the university supervisor and mentor teacher, the intern is incapable of remediating his/her performance deficits or there is reason to believe that having the intern continue in internship would have a substantially negative effect on students, faculty or staff in the school, that intern shall be pulled from internship (termination). Each of these courses of action is addressed below.

Remediation Plan. The university supervisor and mentor teacher will collaborate to design and implement a suitable remediation plan, with clearly stated actions and deadlines for improved intern performance. If the intern's performance does not improve, he or she will be withdrawn from internship (termination) and assigned a W, WP, WF, or F, as appropriate.

Termination of Internship. Interns who are pulled from student teaching before completing it will not be recommended for certification, regardless of their grades in other courses and they may not re-take internship.

Termination/Subsequent Ineligibility Appeal Process

Interns whose student teaching internship was terminated and/or who have been ruled ineligible for a subsequent student teaching internship have the right to appeal this decision. To do so, they should follow the *Course-related Non-Grade Grievance* process (see the *Grievances* section of this handbook or the Education and Human Services department manual).

A majority of the appropriate program faculty members must vote to approve placing the teacher candidate in a subsequent student teaching placement. The comments of the program director(s) on the grievance form shall reflect what occurred in that meeting and the program faculty's decision. If a subsequent student teaching placement is authorized, the teacher candidate will most likely be required to complete a formal remediation plan with clearly stated actions and deadlines. If the candidate fails to complete this plan adequately and on time, he or she will be deemed ineligible for student teaching.

Deferment of Internship

Teacher candidates are not typically allowed to withdraw from student teaching or to suspend their completion of student teaching. If, however, an intern who is otherwise performing well in student teaching finds himself or herself unable to complete student teaching due to some force outside his or her control, that intern may request a deferment. Outside forces might include such things as family emergencies, illness and accident or other non-academic forces that would prevent the intern from complete student teaching within the prescribed time. Deferments will not be granted automatically; the appropriate faculty will be informed of the situation and must vote to approve the deferment.

Deferment Denial Appeal Process

Interns whose requests to suspend student teaching placement were denied have the right to appeal this decision. To do so, they follow the *Course-related Non-Grade Grievance* process (see the *Grievances* section of this handbook or the Education and Human Services department manual). As part of that process, the meeting with the program director will be preceded by a meeting with the appropriate program faculty in which the teacher candidate presents his/her case for deferring internship.

A majority of the appropriate program faculty members must vote in favor of placing the teacher candidate in a subsequent student teaching placement. The comments of the program director(s) on the grievance form shall reflect what occurred in that meeting and the program faculty's decision.

COLLEGE OF EDUCATION GRIEVANCE PROCEDURES

While our goal should be to resolve disagreements, misunderstandings and conflicts through discussions among those involved, there are times when more formal procedures of resolution are needed in order to resolve student grievances. For this reason, students in the College of Education may seek redress of grievances through various agencies and procedures within the college and the broader university. The sections that follow describe procedures to be employed in appealing specific types of grievances.

If a student feels his or her grievance is not addressed by one of the procedures below, however, or the student is unsure how to proceed and would like advice on available options for recourse, that student may meet with the Associate Dean for the College of Education (A325 Iacocca Hall, 610-758-3249), the Dean of Students Office (UC 210; 610-758-4156; <http://www.lehigh.edu/~indost/>) or one of the university ombudspersons (<http://www.lehigh.edu/~inombuds/contact.html>).

Mark/Grade Appeals

1. A student (or group of students) questioning the validity of an assigned mark must file a *written* appeal with the course instructor no later than the last day of classes of the semester following receipt of the final course mark. In the case of spring and summer courses, this means the last day of class of the fall semester, while for fall courses, this means the last day of classes of the spring semester. These deadlines do not, however, limit the ability to correct a mark/grade based on miscalculation or data entry error.
2. In this written appeal, the student(s) shall, using the *Mark/Grade Appeal* form, provide the title and number of the course taken, the name of the course's instructor(s), the term (Fall, spring, summer) and year in which the course was taken, the specific mark under appeal and what it covered (for example, homework assignment, project, presentation, field experience, final course mark) and a detailed description of the reason(s) the assigned mark is inappropriate. Students may obtain the *Mark/Grade Appeal* form online at this link: [COE GradeAppealForm.pdf](#), or from either their program coordinator or the departmental coordinator, Donna Ball, in A325.
3. If the student(s) and instructor(s) are unable to resolve the disagreement to the satisfaction of the student(s), the written appeal—now with a written response from the instructor(s)—moves forward to the director of the academic program. (In certain cases involving adjunct instructors, however, the appeal may go first to a faculty supervisor appointed by the academic program. If such a supervisor is involved, he or she meets with the student(s) and instructor(s) and attempts to help resolve the disagreement. If unable to do so, that supervisor adds his or her comments on the merits of the appeal and sends the appeal packet to the program director.)

The program director meets with the parties to seek a resolution. If the program director is unable to facilitate resolution, he or she adds comments on the merits of the appeal to the appeal package and it then moves to the department chair who follows the same procedures in attempting to resolve the difference. If he or she is also unsuccessful, the appeal package—now including the department chair's comments—moves to the Dean of the College of Education who examines the entire packet, interviews the student(s) and instructor(s)—if the dean deems such interviews necessary—and issues a decision on the grade appeal.

4. If, upon receiving the decision of the dean, the student or students involved still wish to pursue appeal, they may use the formal university graduate petition process described below under *Right of Appeal of Academic Grievances*.

Redress of Grievances Based on Discrimination

Any student complaint of discrimination, if such complaint is not within the jurisdiction of the Committee on Standing of Graduate Students (SOGS) or the university judicial system, shall be dealt with in accordance with the university discrimination grievance procedures. This includes appeals regarding accommodations granted by the Office of Academic Support for Students with Learning Disabilities.

For the purpose of these procedures, a *grievance* is a claim that a student has been discriminated against on the basis of age, color, disability, gender, gender identity, marital status, national or ethnic origin, race, religion, sexual orientation or veteran status, in violation of the university's policy on Equal Opportunity/Affirmative Action/Non-Discrimination.

Before filing a formal grievance, the complainant should discuss the complaint with the Associate Dean of Students (UC 210; 610-758-4156; <http://www.lehigh.edu/~indost/>) who will then advise on an appropriate course of action. This step

provides an opportunity for the informal resolution of a situation that may be discriminatory. In such a resolution, the Associate Dean of Students may refer the student to other sources of help or serve as a mediator between the student and the perceived source of the problem.

Where the matter is not subject to informal resolution, the student may file a formal grievance with the Associate Dean of Students (UC 210) who serves as designee for the Provost for receipt of such grievances under the university's Policy on Equal Opportunity/Affirmative Action/Non-Discrimination. Such formal grievances will be handled using the university discrimination grievance procedures detailed in the university student handbook.

Redress of Grievances Based on Harassment

Grievances based on harassment are covered under university procedures specified in the university policy on harassment. To obtain a copy of the policy, as well as information on the university person(s) you should contact, please visit:

<http://www.lehigh.edu/~inprv/faculty/harassmentinformation.html>

Redress of Other Course-related Academic Grievances

1. A student (or group of students) with a complaint that arises out of any course but is not covered by one of the procedures above should bring the complaint first to the instructor of the course in which the source of the grievance occurred. This grievance may be presented orally, although the student(s) should make clear the nature of the grievance and what action he/she/they would like taken to resolve that grievance.
2. If, after meeting with the instructor, students do not feel satisfied, they prepare a written grievance to take to the director of the academic program in which the course is offered. This written grievance, which must be completed using the *Course-related Non-grade Grievance* form, shall document the title and number of the course taken, the name of the course's instructor(s), the term (fall, spring, summer) and year in which the course was taken, a description of the events or actions leading to the complaint and a proposed resolution to the complaint. Students may obtain the *Course-related Non-grade Grievance* form online ([COE_CourseRelatedNonGradeGrievanceForm.pdf](#)), or from either their program coordinator or the departmental coordinator, Donna Ball, in A325.
3. The program director asks the instructor(s) to submit a written response to the grievance and attaches this response to the student grievance packet. The program director then meets with the parties to seek a resolution. If unable to do so, he or she adds comments to the grievance package and it then moves to the department chair who follows the same procedures in attempting to resolve the situation. If he or she is also unsuccessful, the grievance package—now including the department chair's comments—moves to the Dean of the College of Education who examines the entire packet, interviews the student(s) and instructor(s)—if the dean deems such interviews necessary—and issues a decision on the grievance.
4. If the student/group of students has/have serious concerns about meeting with the instructor, he/she/they may skip the meeting described under #1 above and move the grievance directly to the director of the academic program. Similarly, if students have serious concerns about meeting with the program director (#2 above), the grievance may move directly to the department chair. In either case, the grievance must be written, being sure to include the information specified in #2 above.

While skipping individuals in the hierarchical grievance procedure is not a recommended course of action, if students have *serious* concerns about holding such meetings, they may choose to do so. This does not, however, eliminate the ability of the individual skipped to respond to the grievance packet. It simply eliminates the face-to-face meeting that might have resolved the grievance without moving to the next higher level. If students have such serious concerns, they may consult the Associate Dean for the College of Education (A325 Iacocca Hall, 610-758-3249), the Dean of Students Office (UC 210; 610-758-4156; <http://www.lehigh.edu/~indost/>) or one of the university ombudspersons (<http://www.lehigh.edu/~inombuds/contact.html>) for guidance on how to submit the grievance.

5. If, upon receiving the decision of the dean, the student or students involved still wish to seek redress, they may use the formal university graduate petition process described below under *Right of Appeal of Academic Grievances*.

Redress of Non-course-related Grievances

1. A graduate student (or group of graduate students) with a grievance related to an activity **outside** courses—including research activities—that is not covered by one of the procedures listed above, should bring that grievance first to the responsible faculty or staff member. In the meeting with that faculty or staff member, students may describe their grievance orally, provided that they make clear the nature of the grievance and how they would wish it redressed.
2. If, after meeting with the responsible faculty or staff member, students wish to pursue the matter further, they use the *Non-course-related Grievance* form to prepare a written grievance that (1) identifies the individuals involved, (2) notes when the events or actions leading to the grievance occurred, (3) describes why they were inappropriate and (4) proposes actions to

resolve the grievance. Students may obtain the *Non-course-related Grievance* form online ([COE NonCourseRelatedGrievanceForm.pdf](#)), or from either their program coordinator or the departmental coordinator, Donna Ball, in A325.

3. The written grievance then moves to the appropriate program director or university supervisor, who asks the responsible faculty or staff member to submit a written response to the grievance and attaches this response to the student grievance packet. The program director or university supervisor then meets with the parties involved and seeks to resolve the grievance. If unable to do so, he or she adds comments on the merits of the grievance to the grievance package and it then moves to the department chair who follows the same procedures in attempting to resolve the situation. If he or she is unsuccessful, the grievance package –now including the department chair’s comments— moves to the Dean of the College of Education who examines the entire packet, interviews the student(s) and responsible faculty or staff member —if the dean deems such interviews necessary– and issues a decision on the grievance.
4. If the student/group of students has/have serious concerns about meeting with the responsible faculty or staff member, he/she/they may skip the meeting described under #1 above and move the grievance directly to the director of the academic program or the appropriate university staff supervisor. Similarly, if students have serious concerns about meeting with the program director or university staff supervisor (#3 above), the grievance may move directly to the department chair. In either case, the grievance must be written, being sure to include the information specified in #2 above.

While skipping individuals in the hierarchical grievance procedure is not a recommended course of action, if students have *serious* concerns about such meetings, they may choose to do so. This does not, however, eliminate the ability of the individual skipped to respond to the grievance packet. It simply eliminates the face-to-face meeting that might have resolved the grievance without moving to the next higher level. If students have such serious concerns, they may consult the Associate Dean for the College of Education (A325 Iacocca Hall, 610-758-3249), the Dean of Students Office (UC 210; 610-758-4156; <http://www.lehigh.edu/~indost/>) or one of the university ombudspersons (<http://www.lehigh.edu/~inombuds/contact.html>) for guidance on how to submit the grievance.

5. If, upon receiving the decision of the dean, the student or students involved still wish to seek redress, they may use the formal university graduate petition process described below under *Right of Appeal of Academic Grievances*.

Right of Appeal of Academic Grievances

In general, a graduate student has the right to petition on any academic matter of concern. Petition forms are available online ([LU GradStudentPetitionForm.pdf](#)), or from all program coordinators in the College of Education, as well as the Deans Office (A325 Iacocca Hall).

With the exception of grievances involving discrimination and harassment, which are covered by separate policies and sets of procedures, student failing to gain satisfaction using the procedures described above may appeal by petition to the Committee on Standing of Graduate Students (SOGS). This committee includes the graduate associate deans of all four colleges, the Director of Graduate Student Life and a representative from the Graduate and Research Committee (GRC). The SOGS committee meets regularly with the Registrar and considers all graduate petitions. The Registrar’s Office notifies the petitioner of the decision of the committee.

If a petitioner is not satisfied with the decision of the SOGS Committee, he or she may appeal the decision to the full GRC. Appeals to the full GRC are, however, rare and the appellant must make clear in writing why the decision of the SOGS Committee was inappropriate and why whatever resolution the petitioner proposes is more appropriate.

Teacher Certification Programs

The College of Education's teacher certification and degree programs are built upon the premise that teachers must simultaneously be subject matter experts and highly skilled at helping others' understand the content as well. Good teachers know enough about the subject to be sensitive to those aspects that will be especially hard for new students to master and are able to adapt the design of their instruction accordingly. In other words, we believe expert teaching occurs at the intersection of discipline-specific knowledge and pedagogical knowledge. For this reason --and unlike other four-year undergraduate education programs-- our teacher education coursework is *in addition to* (not in place of) the depth and breadth of coursework required to get a complete bachelor's degree in a discipline-specific area.

PA Certification is widely accepted nationwide under reciprocity agreements with many other states. For more information, go to <http://www.nasdtc.org/agreement.tpl>.

PENNSYLVANIA DEPARTMENT OF EDUCATION REQUIREMENTS FOR TEACHER CERTIFICATION

It is important for individuals considering teaching as a career to be aware of the fairly rigorous academic, health, and personal character requirements for teacher certification that are required by the Pennsylvania Department of Education for teacher candidates statewide:

- An overall GPA of at least 3.0 (both graduate and undergraduate).
- An undergraduate course work audit by content area specialist in the certification area.
- Passing scores on the PDE required teacher certification tests (Level I and Intern certificates) in all subject areas prior to student teaching.
- Submission upon matriculation and yearly renewal of all of the following clearances:
 - Mantoux Tuberculosis Screening or chest X-ray
 - FBI Federal Criminal History Record (Act 114)
 - Pennsylvania State Police Criminal Records Check (Act 34)
 - Pennsylvania Child Abuse History Clearance (Act 151)

Before the teacher candidate will be placed in the schools as part of his/her certification or degree program, the Mantoux or chest X-ray must be **negative** and all 3 required criminal background checks must indicate that "**no record exists.**" If anything other than "negative" or "no record exists" is reported on a student's documentation, the exact nature of the reported health or criminal record issue will be reviewed by the OTC Director in accordance with the *College of Education Policy on Clearances*. Clearances documentation must be presented for verification and copying to the Coordinator of the Office of Teacher Certification (Iacocca A108) upon matriculation into a teacher education academic program and must be renewed yearly while pursuing your studies. Additional information about our clearances policy can be found on our website at <http://www.lehigh.edu/education/tlt/clearances.html>

***IMPORTANT NOTE:** The Pennsylvania Department of Education (PDE) has issued new certification guidelines for initial teacher certification that divide elementary (K6) certification into two separate certifications: Pre-kindergarten to 4th grade and 4th grade to 8th grade. Lehigh is in the process of revising its current elementary teacher preparation program to address the requirements of these new certifications and will, in future, only offer the PreK-4th grade certification at the elementary level. In addition, all preparation programs for new secondary (7-12th grade) teachers have new requirements for addressing the needs of students with diagnosed learning disabilities and students who are learning the English language. These requirements took effect for all students who began coursework toward teacher certification after December 31, 2010. Students already enrolled in either our previous K-6 teacher-preparation program or our previous secondary teacher-preparation program must complete their programs of study by August 31, 2013. Students who will not be able to complete their teacher certification eligibility programs by that date will need to complete one of the new PDE-approved teacher certification eligibility programs (PreK-4 or 7-12).

Academic Programs

The Teaching, Learning, & Technology Program actively prepares **pre-service teachers** through its programs in Pennsylvania state teacher certification, including:

- **The Post-bachelor's Teacher Education Programs:** the M.Ed. or M.A. programs with certification in either elementary or secondary education.
- **The Five-year Teacher Education Program:** the bachelor's plus M.Ed. program with certification in either elementary or secondary education.
- **The Teacher Intern Certificate Program:** alternate certificate route after only 12 credits for teacher candidates who find employment in the schools.

We are accredited by the Pennsylvania Department of Education to certify teachers in the following areas:

- Elementary PreK-4
- Environmental Education K-12
- Secondary Biology 7-12
- Secondary Chemistry 7-12
- Secondary Citizenship Education 7-12
- Secondary Earth and Space Science 7-12
- Secondary English 7-12
- Secondary General Science 7-12
- Secondary Mathematics 7-12
- Secondary Physics 7-12
- Secondary Social Sciences 7-12
- Secondary Social Studies 7-12

There is also an option for *dual certification* in Special Education for an additional 12-15 credits (depending on grade band). See below for more details about each of our academic programs in teacher education.

Post-bachelor's Teacher Education Programs

Elementary Teacher Education Program

Master of Education and PA Instructional Level I Certificate in only PK-4 (42 credit min.)

Master of Education and PA Instructional Level I Certificate in both PK-4 and Special Education (54 credit min.)

The elementary teacher intern program leads to a Master's of Education (M.Ed.) degree and Instructional I certification that qualifies the candidate to teach in the public schools of Pennsylvania. The program is designed for the college graduate who, as an undergraduate, specialized in a field other than education and who is capable of beginning his or her study of professional practice at an advanced level. PA Certification is widely accepted nationwide under reciprocity agreements with many other states.

The focus of the program is the development of the intern's understanding of the aims and curricula of early elementary or early childhood schools, the purposes and methods employed in teaching *all* learners (including those with special needs and ELL), basic principles of research and testing, and the techniques of gathering and analyzing educational data. The intern completes a specified program, bears major responsibility for a teaching experience in a supervised practicum, and participates in methodology seminars, being supervised throughout by Lehigh University faculty members. The program leading to only PreK-4 certification can be completed in 42 credit hours.

Dual certification in PreK-4 Elementary and Special Education is also an option for an additional 12 credits (54 credit hours total). Dual certification students may declare their M.Ed. in *either* elementary or special education.

Program of Study for PreK-4 Certification Only: (all courses are 3 credits each; 42 credits total)

PreK-4th Grade General Ed

TLT 380. Child Development and Cognition
TLT 407. Instructional Design for K-12 Classrooms
TLT 412. Social Studies in PreK through 4th Grade
TLT 420 Reading and Literacy in PreK through 4th Grade

TLT 422. Language Arts in PreK through 4th Grade
TLT 426. Science in PreK through 4th Grade
TLT 428. Mathematics and Numeracy in PreK-4th Grade
*TLT 444. General Education Student Teaching and Seminar

Special Education Overlap

SpEd 332. Education and Inclusion of Individuals with Special Needs in K-12
SpEd/TLT 404. Diversity, Families, and School Collaborations in K-12
SpEd/TLT 405. Principles and Applications of K-12 Assessment

SpEd/TLT 409. K-12 Classroom Environment and Management
SpEd/TLT 411. Early Childhood Education
SpEd 465. Advanced Inclusionary Practices in K-12

Additional Coursework for Dual PreK-4 and Special Education PreK-8 Certification:

(all courses are 3 credits each; 54 credits total)

SpEd 419. Academic Interventions: PreK-8
SpEd 418. Alternative Curricular Approaches

SpEd 432. Positive Behavior Support
SpEd 452. Assessment in Special Education

**Note: if pursuing dual certification, students substitute TLT 442: General Education and Special Education Student Teaching Seminar for TLT 444 above.*

Secondary Teacher Education Program

Master of Education (M.Ed.) and PA Instructional Level I Certificate in only 7-12 Secondary (30 credit min.)*

Master of Education (M.Ed.) and PA Instructional Level I Certificate in both 7-12 Secondary and Special Education (42 credit min.)*

The secondary teacher intern program leads to a Master's of Education (M.Ed.)** degree and Instructional I certification that qualifies the candidate to teach in the public schools of Pennsylvania. The program is designed for the college graduate who, as

an undergraduate, specialized in a field other than education and who is capable of beginning his or her study of professional practice at an advanced level. PA Certification is widely accepted nationwide under reciprocity agreements with many other states.

The focus of the program is the development of the intern's understanding of the aims and curricula of secondary schools, the purposes and methods employed in teaching *all* learners (including those with special needs and ELL), basic principles of research and testing, and the techniques of gathering and analyzing educational data. The intern completes a specified program, bears major responsibility for a teaching experience in a supervised practicum, and participates in methodology seminars, being supervised throughout by Lehigh University faculty members. The program leading to the M.Ed. * and 7-12 Secondary certification only can be completed in 30 credit hours.

Dual certification in 7-12 Secondary and 7-12 Special Education is also an option for an additional 15 credits (45 credit hours total). Dual certification students may declare their M.Ed.** in *either* Secondary or Special Education.

Program of Study for 7-12 Secondary Certification Only: (all courses are 3 credits each; 33 credits total)

7th-12th Grade General Ed (all 5 of the following):

TLT 407. Instructional Design for K-12 Classrooms
TLT 432. Reading & Critical Thinking in 7th-12th Grade Ed.
TLT 440. Pre-professional Seminar

TLT 444. Student Teaching and Seminar
Elective (with approval of adviser)

Content-area Special Teaching Methods course (one of the following):

TLT 431. Social Studies in 7th-12th Grade Education
TLT 434. English in 7th-12th Grade Education

TLT 436. Science in 7th-12th Grade Education
TLT 438. Mathematics in 7th-12th Grade Education

Special Education Overlap (all 5 of the following):

SpEd 332. Education and Inclusion of Individuals with
Special Needs in K-12
SpEd/TLT 404. Diversity, Families, and School
Collaborations in K-12

SpEd/TLT 405. Principles and Applications of K-12
Assessment
SpEd/TLT 409. K-12 Classroom Environment and
Management
SpEd 465. Advanced Inclusionary Practices in K-12

Additional Coursework for Dual 7-12 Secondary and 7-12 Special Education Certification:

(all courses are 3 credits each; 45 credits total with 3 of these credits applied toward elective, above):

SpEd 418. Alternative Curricular Approaches
SpEd 432. Positive Behavior Support
SpEd 452. Assessment in Special Education

SpEd 421. Academic Interventions: Secondary
SpEd 423. Transition to Post-school Life

**Note: For dual certification, students substitute TLT 442: General Education & Special Education Student Teaching Seminar for TLT 444 above.*

*NOTE: Lehigh also offers a Master of Arts (M.A.) in Secondary Education option. Whereas the M.Ed. track comprises the “core skills” plus the “development of professional skills” courses for a total of thirty-three (33) credits, the M.A. track adds a block of twelve (12) credits of advanced work in a teaching specialty. For example, a social sciences teacher may select courses from anthropology, psychology, and sociology; a science teacher may select course work from the natural and physical sciences. Other areas of emphasis include English and mathematics. Students who want their M.A. in Secondary Education and dual certification in Special Education will take a total of 57 credits.

The 5-Year Bachelor's + Master of Education and General Education Teacher Certification Programs

Our 5-year Bachelor's plus Master of Education and Teacher Certification Program begins in the spring semester of the sophomore year with a 3-credit initial course in either child development or inclusionary practice. During the junior year, 5-year students take an additional 3 education credits (typically in the fall) in classroom management and practice. In the senior year, students complete a year-long core skills course sequence while also completing two teaching methods courses (12 credits total). After graduating with their bachelor's, students continue their master's and certification program with coursework in the summer (12 credits), fall (9 credits), and round out their experience in the spring with student teaching and the student teaching seminar (3-6 credits). All of our teacher education courses explore best practices in evidence-based teaching and learning carefully designed to integrate real-world classroom experiences. The actual number of credits required will vary depending on undergraduate degree and area of certification selected by the candidate.

Both the early elementary and secondary 5-year programs lead to a Master of Education (M.Ed.) degree with an Instructional I Certificate that qualifies the candidate to teach in the Pennsylvania public schools. Pennsylvania Certification is widely accepted nationwide under reciprocity agreements with many other states. A dual certification option in Special Education is also available for an additional 12-15 credits (depending on grade band of initial certification).

Additional Notes for 5-Year Program Students:

- ✓ **Graduate Course Clearance for Undergraduates:** Every semester while still an undergraduate, 5-year students must get permission to register for graduate-level courses. A minimum cumulative GPA of 2.75 is required for undergraduates to be cleared to take graduate education courses. Your College of Education advisor can help you plan your classes and process your Education course clearance(s). You will be sent an email when you have been cleared to register for your class(es). A maximum of 6 Education credits may be taken per semester while enrolled as an undergraduate student.
- ✓ **Application to Graduate School:** By December 1st of your Senior Year, 5-year students should apply for admittance into the College of Education's graduate programs. Your application should include: data sheet, application fee, essay, 2 letters of recommendation (*not from TLT faculty*), and any non-Lehigh undergraduate transcripts (if applicable). A minimum cumulative undergraduate GPA of 3.0 is required for admission as a regular graduate student to the master's/certification program. A maximum of 12 credits may be transferred (by petition) from the undergraduate program and used toward the master's degree. Only courses taken beyond the B.A./B.S. degree requirements will be considered and must be approved by the College of Education and the Registrar's Office.
- ✓ **Financial Support:** There are a limited number of scholarships available through the Department of Education and Human Services. Scholarship applications are available from the TLT Program Coordinator.
- ✓ **President's Scholars Information:** Anyone who finishes his/her undergraduate program with a 3.75 GPA or better and at least 90 credits taken at Lehigh, qualifies for 12 months of tuition-remission for further undergraduate or graduate coursework at Lehigh. Additional information is available at <http://www.lehigh.edu/~inrgs/PresidentsScholarAward.shtml>
- ✓ **Dual Certification Option:** Dual certification in Special Education is an option available to 5-year students, but will likely require more than just one additional year of coursework beyond the bachelor's. Interested students should contact their adviser for more details.

Teacher Intern Certificate Program

The Teacher Intern Certificate is a valid professional certificate that entitles the holder to hold a full-time professional teaching position, with all rights and privileges of a temporary professional employee as defined by Pennsylvania state law. The current regulation states that a Teacher Intern Certificate qualifies the holder to hold a full-time elementary or secondary school teaching position in the certification endorsement area.

The minimum requirements for Lehigh University to issue a Teacher Intern Certificate includes completing 12 hours of academic course work in one of Lehigh's teaching certification programs, a job offer **in writing** from a Pennsylvania school district, and passing of the PDE required teacher certification exams.

The Teacher Intern Certificate is issued for a period not to exceed **three calendar years** and qualifies the holder to perform all the duties, functions and responsibilities of the certification area(s) for which it is endorsed. In the meantime, the certificate holder must be continuing to pursue his/her full certification.

The Teacher Intern Certificate becomes valid the month of issuance and lapses 36 months later whether or not the holder has been continuously employed on the Intern Certificate by a public school. **This certificate can only be issued once, and under no circumstances can this certificate be renewed.** The Teacher Intern Certificate is valid for general education areas regularly endorsed on instructional certificates and remains valid only while the holder (a) renders **satisfactory service** to the employing school entity, and (b) **maintains continuous enrollment** and makes satisfactory progress within an approved teacher intern program leading to issuance of the Instructional I certificate.

Additional information about The Teacher Intern Certificate is available on the PDE Web site at:

http://www.portal.state.pa.us/portal/server.pt/community/other_routes_to_certification/8818/intern_certification/506789

Benchmarks and Assessments for Teacher Certification

Lehigh University's Teaching, Learning, & Technology (TLT) Program is an approved teacher preparation program by the Pennsylvania Department of Education. Students who secure the recommendation for certification by the university have met all requirements of the approved preparation program, the qualifying scores on the appropriate PDE required teacher certification tests and other requirements established by the State Board of Education.

The items in this section describe the required benchmarks and assessments required for teacher certification.

Online Professional Teaching Portfolio

Each student is required to create an online professional teaching portfolio that is aligned with the Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice (PDE 430) and Lehigh program requirements. Portfolios are housed on each student's personal Lehigh Web space.

During their internship semester, teacher certification students submit their final portfolio to demonstrate partial fulfillment of the Pennsylvania Department of Education teaching competencies. After graduation, portfolios are archived on a Lehigh server for students to use for employment pursuits.

PDE 430 Requirements

Pennsylvania Statewide Evaluation of Student Professional Knowledge and Practice (PDE 430, 430A, and artifacts)

During their internship semester, students are evaluated using the PDE 430 and 430A. The PDE 430 and 430A are the elements of the formative and summative evaluation processes that are required for certification in Pennsylvania. The TLT faculty have developed the following protocol for meeting the requirements of the statewide evaluation system:

- *Lesson plans.* Every Friday throughout the internship, interns are required to submit to their mentor teacher daily lesson plans for the entire following week.
- *Lesson Plan notebooks.* Each intern is required to compile a lesson plan notebook that also contains exemplary artifacts. All lesson plans in the lesson plan notebook should be organized by subject/class and date. The lesson plan notebook must be complete and up-to-date and in the intern's classroom at all times, for review by either the mentor teacher or Lehigh supervisor. Failure to maintain the notebook is evidence of non-compliance with PDE standards.
- *Formative assessment.* Interns are assessed formatively four times during their fourteen-week student teaching assignment. The Lehigh supervisor and mentor teacher each complete two formative assessments (one at the midpoint and one near the end of the assignment) using Lehigh's version of the PDE 430, the Formative Teacher Candidate Evaluation (FTCE) form.
- *Summative assessment.* A summative evaluation is done at the end of the fourteen-week internship using the PDE 430.

PDE Required Teacher Certification Examinations

The Commonwealth of Pennsylvania (PDE) requires passing scores on PDE Required Teacher Certification Examinations for all persons seeking Intern/Instructional Level I certification for each subject area to be issued on the certificate. Information on which tests teacher candidates must take prior to certification is available online at:

http://www.portal.state.pa.us/portal/server.pt/community/testing_requirements/8638

Clearances for Students Seeking Teacher Certification

It is critically important that teacher candidates maintain their clearances documentation throughout their academic program. See section on "Policies" > "Clearances," above.

Field Experiences for Teacher Certification

Students enrolled in a TLT teacher certification program are provided multiple opportunities to apply their learning in actual classroom settings throughout the program. Formal field experiences include *Pre-Professional Seminar (Participation in Teaching)* and *Intern Teaching (Student Teaching)*.

The Coordinator of the Office of Teacher Certification (OTC) is responsible for making field placements in regional public schools (within 30 miles of Lehigh) for all classes including *Pre-Professional Seminar (secondary only)* and *Intern Teaching*. Students are required to complete applications for field placements in *Pre-Professional Seminar* and *Intern Teaching*. Application forms are available from the Office of Teacher Certification.

Pre-Professional Seminar (Secondary Certification only)

This field placement is twenty-five days of experiences in an educational setting and preparation of materials to use in the classroom. Students are placed in area schools in the surrounding Lehigh Valley school districts within a 30-mile radius of campus. In addition, this course addresses the following elements of the Pennsylvania Standards: Knowing Content, Performance, and Professionalism. The twenty-five days include 5 days of guided observation and twenty days of facilitating a chunk of instruction with students under the direction and counsel of a cooperating teacher. Interns assume as much responsibility for the students' learning experience as advised by the cooperating teacher throughout the 20-day period. These are twenty-five full days in a school to experience fully the culture of a school, but not necessarily teaching the entire day. A seminar series accompanies the course.

The PDE 430 observation instrument is introduced in this course, which is required by PDE during intern teaching. This course prepares the student for the fourteen-week intern teaching experience. This course is available only during the fall and spring semesters. Students must fill out the application for *Pre-intern Teaching Experience* and submit to the *Coordinator of the Office of Teacher Certification (OTC)* for placement for this course.

Submission Deadline: Completed and advisor-signed applications for *Pre-Professional Seminar* must be submitted no later than the **last day of registration** in either fall or spring semester. Pre-professional Seminar application forms are available from the Office of Teacher Certification.

Professionalism Rating Scale: In Class Performance

Teacher preparation for certification requires the demonstration of pedagogical knowledge, instructional skills, and professionalism. Professionalism must be demonstrated throughout the teacher preparation program across all activities, including during graduate coursework. This rating scale will be used at the end of each semester for each course. In-class professionalism ratings will be used to make recommendations for student teaching or advanced practicum work, and teacher certification. Poor evaluations may result in not approving student teaching, advanced fieldwork, and/or teacher certification.

1. Student regularly attends class sessions, and notifies the instructor in advance if class will be missed.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

2. Student regularly arrives at class on time and notifies the instructor in advance if the student will be late.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

3. Student comes to class prepared, is engaged in class activities and discussion, and shows interest in learning.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

4. Student communicates with the professor and fellow students with respect and without judgment or blame.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

5. Student handles requirements responsibly by meeting assignment deadlines and seeking assistance when needed in a timely manner.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

6. Student exhibits good partnership or collaborative skills with fellow students (carries weight in group efforts).

Meets Expectations

Needs Improvement

Unacceptable

Comments:

7. Student upholds academic integrity in all assignments.

Meets Expectations

Needs Improvement

Unacceptable

Comments:

Intern Teaching

As their capstone experience, teacher certification students are required to complete a fourteen-week intern student teaching experience. In order to provide adequate supervision coverage, all placements are made within a 30-mile radius of Lehigh's campus. Under the direction of their mentor teacher and Lehigh Supervisor, student teachers assume fulltime teaching responsibilities, including planning and preparation, maintaining a positive classroom environment, delivering sound instruction, and attending to all required out-of-class functions of teachers in the school setting. Interns are expected to acclimate themselves to the total school program and exhibit characteristics of professional educators as outlined in the Pennsylvania's Code of Professional Practice and Conduct for Educators.

Students are not automatically placed in the schools; they must apply for intern teaching by submitting a completed application to the Coordinator of the Office of Teacher Certification. All forms are available from the Office of Teacher Certification. Completed intern application packets must include a current resume and copies of up-to-date clearances documentation (see above section on "Policies" > "Clearances" for more information).

Fall Internship Deadline: Last Friday in January

Spring Internships Deadline: First Friday of in September

The specific location of an internship placement is based on a number of factors, including availability. While special placement requests will be considered, they cannot be guaranteed. Also, once placements are made, they cannot later be changed to accommodate a need that was not previously known to the OTC. Therefore, if you have a legitimately pressing circumstance that you would like taken into account regarding your internship placement, you *must* list that for consideration by the program faculty as part of your internship application along with any additional documentation, as appropriate, to support your request.

Assignment to a teaching internship is not automatic but, rather, subject to approval by the appropriate teacher education faculty (General Education faculty, Special Education faculty, or both Special Education and General Education faculties for dual certification). The program faculty will consider the candidate's request and vote on whether they believe the teacher candidate is ready for internship based on the criteria described in the *Teacher Education Internship Policy* (see above under "Policies" > "Teacher Education Internships: Requirements and Eligibility").

PDE 430 and 430A Forms: Their Role in Intern Evaluation and Professional Growth

As part of the evaluation process for pre-certification teachers, the State of Pennsylvania employs two forms, the PDE 430 and the PDE 430A. The **PDE 430** form asks the evaluator (either the mentor teacher or the Lehigh supervisor) to think carefully about each of four areas of competence and to judge where the intern falls along a continuum of expertise. It also asks the evaluator to combine the four individual ratings to create a holistic or overall rating.

The **PDE 430A** form provides a location for documenting the sorts of artifacts (pieces of evidence) the evaluator used in deciding on the expertise ratings assigned on the PDE 430 form. **Mentor teachers are not required to use the PDE 430A form.** For the midpoint evaluation, the intern will complete most parts of the PDE 430A form and provide it to the Lehigh supervisor before he or she begins completing the PDE 430 form. There are several areas of the PDE 430A form, however, that the evaluator needs to complete, since those areas call for judgments that are usually based on observation. For subsequent evaluations, the intern will update the PDE 430A form and provide it to the Lehigh supervisor in advance of completion of the PDE 430 form.

Much of the evidence an evaluator uses in completing the PDE 430 form is drawn from the two notebooks each intern must maintain: the lesson plan notebook and the artifact notebook. Lehigh interns must keep these up-to-date and complete at all times. The evaluator examines these notebooks as a complement to observations and discussions. This creates a more complete and well-rounded picture of the intern's performance.

Each evaluator is asked to complete PDE forms at least two times: once at the midpoint of the internship (midpoint) and once at the end of the internship (final). In addition, there should be collaborative completion of a summative version of these forms at the end, with the intern, mentor teacher, and Lehigh supervisor agreeing on final ratings and comments in each area and overall (summative). Many evaluators also complete an informal observation using the PDE forms, but this is not required (informal).

Lehigh will provide each mentor teacher with three PDE 430 forms and preaddressed envelopes. Mentors use these envelopes to mail a copy of each completed PDE 430 form to Lehigh. The original version of these forms is given to the intern who places them in the appropriate section of the artifact notebook (where they can be easily reviewed before each subsequent evaluation takes place). Lehigh does not provide a PDE 430 form for the summative evaluation, since the Lehigh supervisor is responsible for producing this unified document and seeing it makes it to the intern's file.

At Lehigh we do not view completing these forms as simply a mechanical task required by the state. Instead, we view them as documentation focused on helping the intern identify areas of both strength and weaknesses and see ways to improve and grow. It is perfectly acceptable to note areas needing improvement and to suggest ways in which the intern might acquire greater expertise.

Both mentor teachers and Lehigh supervisors should provide interns with the originals of their completed PDE 430 and 430A forms for each evaluation. Each evaluator should then meet with the intern and discuss ratings, evidence used, and ways the intern might enhance his or her professional growth. These discussions are intended as two-way dialogues on professional issues, not simply as feedback on performance. They are part of helping the intern make the transition to being a full professional.

Completing the PA Department of Education (PDE) Elementary Education Review

All students who plan to apply for elementary certification must meet with their TLT faculty advisor in their final semester of study to go over the Elementary Education Subject Guidelines sheet to assure they have met all requirements.

The Elementary Education Subject Guidelines are available in the TLT Program Coordinator's office. See Staff information at the end of the manual for room location.

Completing the PA Department of Education (PDE) Mandatory Secondary Content Area Audit

All students who plan to apply for certification in a content area of Secondary Education must meet with the designated content area specialist within each area of desired certification. The purpose of this audit is to confirm the student has met the PDE requirements of "Knowing the Content" within his or her area of specialization.

Specific guidelines for each area of secondary content certification, as well as a list of the designated content area specialists, are available in the TLT Program Coordinator's office. See Staff information at the end of the manual for room location.

There are two components to this "Content Audit": *transcript review* and *teaching unit review*.

Transcript Review

When a student is admitted to the program, he or she meets with the appropriate content area specialist to complete a transcript audit. Prior to that meeting, the student should obtain the specific guidelines sheet for the content area and indicate on that form which courses he or she has taken that meet the requirements in each of the listed areas.

For Lehigh courses, this means listing or marking the completed Lehigh courses. For non-Lehigh courses, the student will need to compare the course descriptions in the Lehigh catalog with those of the courses taken elsewhere and may need to obtain copies of Lehigh course syllabi if unable to determine equivalency from catalog descriptions. If the student feels a non-Lehigh course is equivalent, he or she indicates that fact on the guidelines sheet and should be prepared to explain to the content area specialist why it is equivalent. This may necessitate having course descriptions and actual syllabi available when they meet.

Once the student's "unofficial" guidelines sheet has been completed, the student schedules a meeting with the content area specialist. That specialist reviews the student's coursework and interviews the student to ensure that each content competency area has been met. As the student and content area specialist discuss how coursework in each area satisfies PDE requirements, the specialist transfers the final version of acceptable courses to an "official" guidelines sheet. If a student is deficient in any competency area, the content area specialist specifies a program of study to complete any deficits. This may require the student to use one or more electives in the program to fulfill certification requirements. If the student has many deficiencies, he or she may need to take additional courses beyond the electives available. This is a requirement of PDE, not Lehigh. Lehigh is charged with assuring that the student's program fulfills all requirements for certification and the transcript review is one part of this process.

Once the transcript review is completed, the content area specialist **signs** this "official" form, gives it to the student, and the student is responsible for seeing that the form gets to the TLT Program Coordinator. If the **signed** "official" content area guidelines sheet specifies coursework to meet PDE requirements, the student must complete that coursework in order to apply for certification. If the signed official guidelines sheet says the student has already met all the content area requirements, that student may—in consultation with his or her advisor—choose which additional courses in the content area to take in order to enhance content knowledge.

Completing and signing the official guidelines form fulfills the content area specialist's responsibility for a student's transcript review. That is, content area specialists are not required to confirm students have taken courses specified on the form or have completed the required number of hours of additional content area electives. This is confirmed as part of the advisement and certification process and only students who fulfill these requirements will be recommended for certification by PDE in the content area.

Given that the outcome of the content audit is crucial to successful certification, students are required to meet with the content area specialist(s) in their area(s) in the first regular academic-year semester they are in the program. Students who begin course work in fall or spring will need to meet with the relevant content area specialist(s) in that first semester of study. Since transcript reviews are not performed in the summer, students who begin coursework in summer will be allowed to wait until fall to meet with the relevant content area specialist(s). Students who have not completed their transcript review at the conclusion of their first regular academic-year semester will not be allowed to register for either summer or a regular academic-year semester. The

responsibility here falls on the student, not the advisor. Failure to schedule and complete the transcript review can delay a student's program dramatically, so students should make sure they handle this as soon as possible.

Teaching Unit Review

PDE also requires that a content area specialist review one teaching unit prepared by the applicant for certification. Students typically provide each relevant content area specialist with a copy of a unit plan for one of the stronger unit they taught in intern teaching, along with any supporting resources used in that unit (such as PowerPoint slide printouts, handouts, lists of online resources, and assessment instruments). Given the end-of-semester pressures on faculty, students need to schedule this some time in the last month of intern teaching (the sooner the better). The content area specialist may recommend modification or enhancements to the unit and the student should make these changes. The content area specialist may or may not request that he/she be allowed to review the teaching unit a second time. If the content area specialist signs the teaching unit review form, he or she is counting on the student to complete all suggested changes.

The student is responsible for seeing that the **signed** teaching unit review form gets back to the TLT Program Coordinator. This **signed** form is a necessary part of the certification applicant's record. The TLT Program Coordinator can provide the necessary forms for both transcript review and teaching unit reviews.

Certification Process

We **strongly** recommend those seeking certification apply in Pennsylvania, even if they never intend to teach here. Lehigh has high standards and we go well beyond the minimums PDE requires. This means Lehigh's endorsement of your application carries weight in Harrisburg and, if anything odd occurs, we are a trustworthy advocate for you. Once certified in Pennsylvania, a teacher can generally get certified fairly easily in another state under the reciprocity agreements among state departments of education. Lehigh, however, has little "pull" with state departments of education outside Pennsylvania, so if something unusual happens, Lehigh can do little to help you get certified in other states.

The Pennsylvania Department of Education (PDE) now requires that you apply for your Instructional I certificate using their online TIMS process. This process at Lehigh is facilitated through the Office of Teacher Certification. The Appendix in this manual contains information about this process. For more additional information, see: <http://coe.lehigh.edu/otc/tims>

In order for Lehigh to recommend certification to PDE, we must have received passing scores on all required PDE required teacher certification tests. We cannot submit an application simply because the tests have been taken. The application requires passing scores.

Professional Development Master's Programs

Today there is much pressure on teachers and schools to incorporate technology more directly in the classroom, particularly in light of “21st century workforce” demands. In addition, schools handle a wider range of student abilities and differences today than ever before.

While instructional technology tools promise to help enhance what teachers can do, many teachers are not well prepared to use them. Traditional in-service training tends to focus on smaller-scale issues, like how to operate a particular piece of equipment or use a specific piece of software. Often such in-service programs focus more on what is termed productivity software (like word processors and spreadsheets) than on instructional software or instructional uses of the World Wide Web. Seldom do teachers (or “technology support” staff and administrators) get a broader view of technology’s potential role in the schools.

Our professional development master’s programs are targeted toward educators in a variety of roles who wish to incorporate technology in their schools or are already doing so, but wish to do so more effectively. Those who might benefit include:

- Inservice (current) teachers who wish to enhance their skills in using technology in the classroom.
- Technology coordinators or curriculum lead teachers who would plan for technology use in the schools, train teachers and others to use technology, or coordinate the use of technology in the schools.
- Administrators who manage teachers and need practical strategies and tools to enhance their performance as educational leaders.
- Individuals who anticipate assuming administrative responsibilities as the “next step” in their career advancement.
- Pre-service (future) teachers who expect to work in a teaching position that requires them to integrate technology into teaching and learning.

Additional Notes for Master’s students:

- ✓ **Clearances:** Depending upon the specific courses you choose or research activities you engage in while pursuing your master’s degree program, it may become necessary to obtain proper school placement clearances in accordance with Pennsylvania Department of Education regulations. See section above on “Policies” > “Clearances” for more information.
- ✓ **Financial Support:** There are a limited number of scholarships available through the Department of Education and Human Services. Scholarship applications are available from the TLT Program Coordinator.

Academic Programs

Post-Certification Master’s in Teaching and Learning

M.Ed. or M.A. (30 credits minimum)

The goal of the post-certification Master’s in Teaching and Learning is to provide professionally oriented practicing classroom teachers an in-depth understanding of classroom learning environments and experience in classroom-based research methods. These classroom teachers will have the skills to enhance the design of classroom learning environments, develop innovative curricula, and conduct research in classroom settings.

Program of Study:

Core Coursework (15 credit hours)

TLT 401. Overview of Teaching and Learning (3)

TLT 403. Instructional Design (3)

TLT 480. Curriculum Theory and Design (3)

Educ 471. Diversity and Multicultural Perspectives (3 cr.)

Educ 403. Research (3)

Select 5 courses from the tracks below: (15 credit hours)

Track 1: Technology in School Settings

TLT 368. Teaching & Learning with Geospatial Tools (3)

TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3)

TLT 460. Advanced Multimedia Programming and Resource Development for Learning (3)

TLT 462. Special Topics in Development of Instructional Resources & Technologies for Learning: <Subtitle> (3)

TLT 470. Technology for Teaching and Learning (3)

TLT 476. Assessment of Instructional Technologies (3)

Other electives as approved by advisor (0-3)

Track 2: Globalization in Education

CIE 400. Comparative & International Education

CIE 401. Globalization & Contextualization

CIE 403. Globalization & Curriculum Implications

CIE 404. Issues and Institutions in International Education Development

CIE 405. Experiencing the United Nations: NGOs in Education Policy & Practice

CIE 406. International Education Policy

CIE 407. Grant Writing and Fund Raising in International Education Development

CIE 414. Globalization and Post-colonialism in Education

CIE 471. Globalization and Education Equity

Other electives as approved by advisor (0-3)

Track 3: Teaching field content

TLT 367. Environmental Education

TLT 368. Teaching & Learning with Geospatial Tools (3)

Educ 419. Second Language Acquisition (SLA) Theory

Educ 421. Intercultural Communication

Educ 422. Theory and Practice for Second Language Learning

Educ 423. Second Language Assessment

TLT 494. Culminating Research Project (3)

Other electives as approved by advisor (0-3)

For the M.Ed.: Courses taken within the College of Education (must be 300 level and above).

For the M.A.: Must include 12 credits of content-area courses taken outside the College of Education (must be 300 level and above).

Master of Science (M.S.) in Instructional Technology ***(30 credit hour minimum)***

The 30-credit Master of Science in Instructional Technology program focuses on the planning and use of instructional technology in preK-12 and post secondary settings and non-formal learning environments (such as museums and science centers). The program is targeted toward individuals from varied backgrounds who wish to help educators or learn themselves to design, develop, and incorporate technology applications more effectively in diverse educational settings including preK-12, post secondary education, and informal learning environments. This is an appropriate degree for those who teach in the classroom and online, technology specialists, informal educators, and others interested in effectively using information and communications technologies to enhance instruction.

The program is designed to help develop skills that can be used to create new curriculum and learning activities to meet the demands of a changing technological society and the needs of new generations of students. As such, graduates may be designing online courses, enhance existing curriculum with emerging technologies, or may work as technology specialists, assisting with the integration of technology in academic and informal learning environments. The Instructional Technology graduate program is intended for both current professionals in the education field as well as those who are seeking an advanced degree to upgrade their skills and knowledge base related to technology.

Program of Study:

College Core Requirements (3 credits)

EDUC471. Diversity and Multicultural Perspectives (3)

Program Core Requirements (15 credits)

TLT 401. Overview of Teaching and Learning (3)

TLT 403. Instructional Design (3)

TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3)

TLT 460. Advanced Multimedia Programming and Resource Development for Learning (3)

TLT 476. Assessment of Instructional Technologies (3)

Electives (pick 4 for 12 credits)

TLT 367. Environmental Education (3)

TLT 368. Teaching & Learning with Geospatial Tools (3)

TLT 462. Special Topics in Development of Instructional Resources & Technologies for Learning: <Subtitle> (3)

TLT 470. Technology for Teaching and Learning (3)

TLT 474. Large-scale Planning and Implementation of Educational Technology (3)

TLT 480. Curriculum Theory and Design (3)

Educ 493. Internship in Teaching, Learning, and Technology (3)

Other electives as approved by advisor (0-6)

Benchmarks and Assessments for Master's Degree Programs

There are presently no additional benchmarks or assessments for students in the TLT Master's Degree Programs beyond what is required as part of their coursework. No master's thesis is required.

Doctoral Program

Academic Program

Doctor of Philosophy (Ph.D.) in Teaching, Learning, and Technology

The doctorate in Teaching, Learning, and Technology (TLT) is a 48-credit, post master's Ph.D. program with concentrations in either Learning and Instruction or Instructional Design and Technology. The TLT Ph.D. program employs a scientist/practitioner model of learning. That is, research is not separate from application or practice. Our doctoral students collaborate closely with faculty to generate new theories and classification systems, innovative curricula that make the most of promising technologies, authentic approaches to assessing learning, and a wide range of creative methods of teaching and learning in a global world highly interconnected by technology.

In keeping with the scientist/practitioner model, our doctoral students learn through innovative approaches, including research-based strategies for curriculum delivery, online synchronous and asynchronous environments, and a wide range of other technology-enhanced designs for learning.

TLT Ph.D. Curriculum

All TLT doctoral students take a common core of 12 credits of foundational coursework and 12 credits of research coursework. For their professional cognate, students then choose between either the *Instructional Design and Technology* or the *Learning and Instruction* concentrations. Finally, students round out their total of 48 credits (minimum) past the master's degree by pursuing directed research projects and professional sub-specialities, as shown below:

Foundations 12 credits (4 required courses)	TLT 401. Overview of Teaching and Learning (3) TLT 403. Instructional Design (3) TLT 402. Critical Reading & Writing (3) Educ 471. (CPsy 471) Diversity and Multicultural Perspectives [or equivalent] (3)	
Research 12 credits (3 required courses, 1 elective, additional as required by adviser)	<i>Required:</i> Educ 403. Research (3) Educ 408. Introduction to Statistics (3) Educ 409. Analysis of Experimental Data (3) <i>Electives (select at least one):</i> Educ 405. Qualitative Research Methods Educ 410. Univariate Statistical Models (3) Educ 411. Multivariate Statistical Models (3) Educ 412. Advanced Applications of Psychometric Principles (3) Educ 416. Quasi-Experimentation and Program Evaluation (3) Educ 461. Single-Subject Research Design (3) Or other statistical research course in TLT, COE, or A&S as approved by advisor.	
Professional Cognate 12 credits (1 required course + 3 electives)	<i>Instructional Design and Technology</i> <i>Required:</i> TLT 454. Applied Instructional and Interface Design Principles (3) <i>Electives (select at least 3):</i> Educ 451. Applied Principles of Cognitive Psychology TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3) TLT 460. Advanced Multimedia Programming and Resource Development for Learning (3)	<i>Learning and Instruction</i> <i>Required:</i> TLT 480 Curriculum Theory and Design. <i>Electives (select at least 3):</i> Educ 451. Applied Principles of Cognitive Psychology TLT 470. Technology for Teaching and Learning (3) TLT 454. Applied Instructional and Interface Design Principles (3) TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3) TLT 474: Large-scale Planning and Implementation of

	TLT 456. Instructional Design and Development Studio (3) TLT 476. Assessment of Instructional Technologies (3) Educ 491. Advanced Seminars: (with subtitle) (1-6) Educ 496. Doctoral Research Seminar (3) Or other instructional design and technology elective course in TLT, COE, or A&S as approved by advisor.	Educational Technology (3) Educ 491. Advanced Seminars: (with subtitle) (1-6) Educ 496. Doctoral Research Seminar (3) Or other learning and instruction elective course in TLT, COE, or A&S as approved by advisor.
Supervised research projects 6 credits minimum	<i>Required:</i> TLT 486. Doctoral Research Project (3) TLT 499. Dissertation (3) <i>Elective:</i> Field experience (Educ 493, 494, or 495), additional topic seminars, dissertation proposal or maintenance of candidacy, or elective with permission of advisor.	<i>Required:</i> TLT486. Doctoral Research Project (3) TLT 499. Dissertation (3) <i>Elective:</i> Field experience (Educ 493, 494, or 495), additional topic seminars, dissertation proposal or maintenance of candidacy, or elective with permission of advisor.
Professional sub-specialty 6 credits	These credits are intended to advance the students' research agenda or career goals (such as a enhanced subject matter knowledge, mentored field/practical experiences with outreach programs, specialized coursework, college teaching, grant writing, and the like) with advisor approval.	

Clearances

Depending upon the specific courses you choose or research activities you engage in while pursuing your master's degree program, it may become necessary to obtain proper school placement clearances in accordance with Pennsylvania Department of Education regulations. See the TLT website for more information.

Qualifying Examination

The intent of Qualifying Examination is to measure both breadth and depth of understanding. These examinations may be either written or oral, or both, and are tailored to the individual student's program of study. Qualifying Examinations are designed to measure mastery within the TLT concentration. In order to be eligible to take Qualifying Examinations, students **MUST** complete TLT 401, TLT 403 and a minimum of 18 credits and a maximum of 30 credits total. Students cannot take additional degree coursework beyond 30 credits until they have passed the Qualifying Examination.

Student success on Qualifying Examination is judged by a committee of at least three members. Once a student completes the Qualifying Examination satisfactorily, he or she is reclassified from *graduate student* to *doctoral student* and moves on to complete the remainder of his or her coursework and begin the General Examination requirements.

Doctoral Research Project (General Examination)

The General Examination is intended to demonstrate that a doctoral student is capable of completing their degrees in a timely fashion by requiring students to apply the same types of research and writing skills they will need to complete their dissertations. The Doctoral Research Project, therefore, typically takes the form of a small empirical pilot study on the same topic as the intended dissertation. This pilot study enables the student to answer some question or set of questions that help in the design of the later dissertation. This pilot research project should be completed near the completion of the student's coursework and at least seven months before the doctoral degree is awarded.

The Doctoral Research Project is completed under the direction of a TLT faculty member and its success is judged by a Doctoral Research Project Committee composed of at least three faculty members. Once a student completes the Doctoral Research Project satisfactorily, he or she moves on to dissertation proposal, completion, and defense.

Application

The TLT doctoral program admits students at the post-master's level. Applicants may come from a wide range of prior academic backgrounds. Admitted students may, however, be required to take additional courses to remediate specific academic deficiencies. Admission is from a competitive pool with admission consideration once per year. Completed applications must be submitted no later than close-of-business on December 1.

Elements of a Complete Application

To be considered for admission, applicants to the TLT doctoral program must submit all of the following:

1. Completed application form.
2. GRE scores (current within the last 5 years).
3. At least two letters of recommendation.
4. A statement that discusses the following:
 - a. Why the applicant believes Lehigh's TLT doctoral program is the best place for him/her.
 - b. What the applicant hopes to be able to do with the degree when he/she finishes.
 - c. A clearly identified research interest with a clear linkage between that interest and the research agenda (research, publications, presentations) of a specific faculty member in the Teaching, Learning, and Technology Program.
5. Two extended student papers or publications demonstrating strong writing ability and the potential to develop persuasive written arguments in English.
6. Official transcripts from all colleges or universities attended.

Additional Requirements for Foreign-educated Applicants:

7. Transcripts from a foreign institution **MUST** be evaluated for equivalency before being sent to Lehigh University. Credential evaluation means converting foreign academic credentials into their U.S. educational equivalents. By converting your educational qualifications into their U.S. equivalents, the evaluation allows academic institutions or employers in the U.S. to understand them. Lehigh University does not promote these services; we inform you of their existence. Please request that these services mail you a course-by-course evaluation converted to U.S. credits and grades.
 - World Education Services <http://www.wes.org/>
 - Educational Credentials Evaluators, Inc. <http://www.ece.org/>
 - Global Credential Evaluators, Inc. <http://www.gcevaluators.com>
1. Foreign students must also supply TOEFL (Test of English as a Foreign Language) scores.

Admissions Interview

Applicants may be asked to come to campus for a face-to-face interview or to participate in a conference call or other electronically mediated interview where an in-person interview is impractical.

Benchmarks and Assessments for the Doctoral Program

Doctoral Qualifying Examination Guidelines

The Qualifying Examination is designed to measure both mastery across the TLT field, as acquired in the foundational and research coursework. Student success on the Qualifying Examination is judged by an *ad hoc* TLT faculty committee of at least three members. Once a student completes these examinations satisfactorily, he or she moves on to additional coursework in the professional cognate.

When A Student Should Undertake the Qualifying Examination

In order to be eligible to take the Qualifying Examination, a student **MUST** have a cumulative graduate GPA of 3.5 or higher on graduate coursework completed at all institutions attended and must have completed a minimum of 18 graduate credits toward his/her doctoral degree at Lehigh, including completion of TLT 401 and TLT 403. A student cannot take additional degree coursework beyond 30 credits until he/she has passed the Qualifying Examination.

Procedure

The Qualifying Examination for TLT doctoral students is held during a five-day consecutive period of the student's choosing during a 6-week period designated by the *ad hoc* TLT faculty committee. The "take home" examination is tailored to the individual student's program of study and is comprised of both a written and an oral component.

The Written Component

Approximately one month prior to the examination period determined by the *ad hoc* TLT faculty committee, the student will receive a letter that 1) requests the student's preferred 5-day examination period; 2) reinforces the procedures for the exam outlined in this document; and 3) provides the five topics for the student's written component of his/her Qualifying Examination.

By 8:00 a.m. on the first of the 5 days of the exam, the student will receive 5 questions via email from one of the *ad hoc* faculty committee members. The students' final answers must be submitted via email to at least one of the *ad hoc* faculty committee by midnight of the last of the 5 days. For example, if a student chooses to sit for the exam between Thursday, December 1st and Monday, December 5th, he/she would receive the questions at 8:00 a.m. on the 1st and would need to submit his/her final answers no later than midnight on the 5th.

The student is required to answer 4 of the 5 questions he/she receives. There is no extra credit for answering all 5 questions.

The examination is open book. In other words, students **are** permitted to refer to outside resources to help them answer the exam questions. That said, responses must be students' own work. After starting the exam, students may not discuss the questions or their answers to them with anyone else.

Further, while multiple students taking the exam during the same period may talk with one another about the exam prior to starting it, once one student has received the questions, the group may not discuss the exam again until all have completed the oral portion (see below). In addition, because variations of these questions may be used at some point in the future, students are not permitted to share the exam questions or discuss them even in general terms with any other students.

Responses to the written exam are restricted to 750-1000 words per question. If one answer runs shorter than 1000 words, one may not "borrow" those words to make another answer longer than 1000 words. The ability to edit well is an important skill we expect to see employed. Students' answers will be evaluated on the extent to which they demonstrate mastery of both course content and literature in the field, as well as thoughtful reflection on both the present and future status of the field.

Since this exam is open book, students are expected to support their answers with citations in correct APA form, using the most current edition. In addition, students will need to include a complete, cumulative APA reference list at the end of the exam (as opposed to a series of shorter lists at the end of each question). This list will not count as part of the 750-1000 word limitation for students' responses, however.

Responses must also comply with the following mechanics:

- Word processed using Microsoft Word
- Double-spaced
- 12-point, Times Roman font
- 1" margins (left, right, top, bottom)
- Pages numbered consecutively

Students must be sure to answer **the questions asked**, not simply supply general content in the supplied topic above. Students who supply such non-specific answers will not pass the Qualifying Exam.

Within one month after the exam period designated by the *ad hoc* faculty committee, the written portion of the Qualifying Examination will be reviewed and the student will be asked to schedule the oral portion.

Each question on the written component of the Qualifying Examination is evaluated based on the following criteria:

Answers question: Doesn't stray from topic or cover content beyond the scope of the question. Response is appropriately balanced in terms of length/importance.

Breadth of knowledge: Demonstrates mastery of the literature on the topic and a firm grasp of the important issues surrounding it.

Quality of thinking: Adequately supported responses with appropriate citations from the field. Carefully and appropriately uses references to help build a perceptive response to a question.

Creativity: Goes beyond mere verbatim reproduction. Critically examines what others have said. Demonstrates creativity and thoughtful reflection on both present and future status of the field.

Writing skill: Demonstrates clear and precise, doctoral-level writing and expressional skills.

The Oral Component

Once the student has submitted his/her answers and the *ad hoc* faculty committee has had time to evaluate them, a member of the committee will contact the student about scheduling a one-hour oral session in which the student will be asked to discuss either issues raised in his/her answers or implications of the provided topics or the answers he/she submitted.

The student is expected to pass both the written and oral portions of the Qualifying Exam. The TLT Program Director will notify the student in writing of the faculty's decision no more than one week following that oral examination.

Each question on the oral component of the Qualifying Examination is evaluated based on the following criteria:

Answers question: Doesn't stray from topic or cover content beyond the scope of the question. Response is appropriately balanced in terms of length/importance.

Breadth of knowledge: Demonstrates mastery of the literature on the topic and a firm grasp of the important issues surrounding it.

Quality of thinking: Adequately supported responses with appropriate references to others' work in the field.

Creativity: Goes beyond mere verbatim reproduction. Critically examines what others have said. Demonstrates creativity and thoughtful reflection on both present and future status of the field.

Speaking skill: Demonstrates clear and precise, doctoral-level speaking and expressional skills.

The two-part Qualifying Examination is a key demonstration of the student's progress in doctoral work. Given that fact, a few clarifications about its purpose are in order. We discuss key issues below.

Things to Keep in Mind

The Qualifying Examination is designed to allow students to demonstrate that they have a broad and firm grasp of the important issues and the relevant literature in the field. This is not an idle exercise. Once candidates are past the Qualifying Exam they are expected to focus their attention on the narrower topic that will constitute their dissertations. The examination, therefore, offers one last opportunity to assure candidates about to undertake the dissertation are also knowledgeable enough to be "doctors of education." That is, they have a firm grasp of the field and are well informed.

When we talk about having a broad and firm grasp of the literature in the field, we are not talking merely about reading whatever articles or book chapters your course instructors have assigned you, nor do we mean just examining a list of recommended readings. Candidates intend to achieve their doctorates, the highest degree in the field. They should, logically, be regular readers of the journals in the field. It is not unreasonable to expect them to read four or five major journals in the field on a regular basis. This is how informed professionals become aware of what is happening in the field and how they advance their knowledge in their specialties. Informed professionals do not merely read for a short period of time -- or as long as someone **requires** them to read. They read regularly and they think hard about what they are reading, what it means and how it fits in with everything else they have read and studied. Publications and presentations should be grounded in an understanding of the literature. Reading and thinking about what one reads are the key steps to acquiring a firm grounding.

So, while students will receive a suggested reading list, it is by no means intended to be exhaustive. In addition to the titles included there, we expect that students will be well read and up-to-date. Students will find the literature in the past 5 years most helpful, although they may wish to do some reading in historical areas to help with selected topics. Students should remember to explore both periodical and book literature.

Since successful candidates will go almost directly from passing the qualifying examination to working with an adviser on the General Examination and then dissertation research projects, the Qualifying Exam also offers a chance for candidates to demonstrate that both their thinking and their writing skills are sufficiently sophisticated to permit them to be successful in these subsequent endeavors. This is why faculty pay particular attention to candidates' expressional skills and their ability to respond to the sorts of questions they may well need to address in writing and defending a dissertation.

Such responses will need to rely both on the work of others and on the candidate's individual creativity and thoughtfulness. References allow the candidate to show what others in the field have said, to build a web of support, or to contrast positions from the literature. Faculty are less concerned, however, with the number of references than with careful and appropriate use of the literature to help build a perceptive response to a question. Candidates are expected to provide thoughtful analyses, careful considerations, promising solutions and recommendations --not just long lists of references. Simple lists of references or uncritical parroting of the thoughts of one's references leave the faculty wondering if the candidate really understands what he or she has written. It also leaves them concerned whether this candidate is ready to undertake the dissertation.

A common professional expectation for individuals with a doctorate in education is the ability to present material and orally respond to questions in an articulate and perceptive way. This may include discussing your own work in public presentations, forming an opinion about issues in the field, or responding to queries about others' work. The oral examination assesses this competency.

Repeating the Qualifying Examination

A student who is judged to have failed the qualifying examination may take it a second time no sooner than 3 months after receiving the faculty's decision. The same procedures for the qualifying examination shall apply to second attempts at taking the exam.

If a student fails the qualifying examination a second time, he or she will be considered ineligible to pursue a doctoral degree in the TLT program. This does not prohibit the student from pursuing additional coursework, nor does it prevent the student from taking a masters degree in TLT.

Under university and college regulations, students who fail the qualifying examination twice may petition to be reconsidered. Their petitions should make clear why the judgment of the TLT faculty should be set aside and why the student should be allowed to attempt the qualifying examination a third time.

Doctoral Research Project Guidelines

The doctoral research project is a *small-scale empirical study* that investigates some aspect of teaching and learning and its application. This study would typically serve as a pilot study of a single component of the student's dissertation research. The TLT Doctoral Research Project counts as the "doctoral research" as required by University policy for the Doctor of Philosophy degree (see the *Lehigh University Course Catalog*).

Purpose

The doctoral research project is designed to demonstrate that a currently enrolled Teaching, Learning, and Technology (TLT) graduate student who has expressed an interest in pursuing a doctoral degree is likely later to be capable of completing a dissertation in a timely fashion.

Among the skills that the project is designed to allow the student to demonstrate include:

- Skill in reviewing the literature.
- Skill in identifying and investigating a focused problem.
- Skill in analyzing and synthesizing relevant literature.
- Skill in identifying appropriate research paradigms and procedures.
- Skill in organizing and presenting ideas in writing.

Students are expected to demonstrate these skills while being advised by a TLT faculty member. While students may sharpen their skills in this interactive process, it is not the responsibility of the advisor to teach these skills to the student formally. For this reason, students who have weaknesses in any of these areas may wish to take additional coursework or complete other experiences before undertaking the doctoral research project.

Procedures

When A Student Should Undertake the Doctoral research Project

In order to undertake the doctoral research project, a student must have a cumulative graduate GPA of 3.5 or higher. The student must have the consent of the major adviser and the *ad hoc* doctoral research project faculty committee (see below) prior to beginning the doctoral research project. Students usually begin this process after completing most of their research methodology course requirements.

When A Student Should Complete the Doctoral Research Project

The doctoral research project comes between the qualifying examination and the dissertation. A student cannot begin the doctoral research project until after he/she has passed the qualifying examination. Students should begin the project upon completion of at least 30 semester hours of post-master's coursework. The doctoral research project must be completed and passed no less than seven months prior to the date of graduation. A student may not register for dissertation credits until after the doctoral research project has been passed.

Securing a Faculty Advisor for the Project

The faculty advisor for the doctoral research project may or may not be the same as the faculty member who serves as the student's academic (program) advisor. Students wishing to work on doctoral research projects should discuss this with their academic advisors first and should identify the faculty member with whom they wish to work on the project. The student is responsible for determining the willingness of that faculty member to serve as project advisor.

Project Prospectus

The topic and format of the project should be developed through consultation with a faculty member in TLT. Students proposing to do the doctoral research project should submit a prospectus no longer than 1800 words (not including references, tables,

figures, or appendices) describing their proposed research study. This prospectus should include: a brief literature review that describes the need for and purpose of the study, research questions to be pursued (when appropriate), research design, and the methods to be used. Any instrumentation to be used in the proposed the study should be supplied in the appendices. As appropriate, full draft of the Institutional Review Board (IRB) protocol (and supporting documents, such as consent letters) should also be included as an appendix.

In consultation with the student, the doctoral research project advisor will recruit two additional members of the TLT faculty to serve as an *ad hoc* committee to review and approve the student's doctoral research project prospectus.

The completed project prospectus must be submitted to the student's *ad hoc* doctoral research project faculty committee for consideration no later than the 12th week of the semester.

Conducting the Research

Once the project prospectus receives approval, the student may pursue IRB approval (if needed) and begin working on the project with his or her doctoral research project advisor.

In each semester during which the student is conducting the research, he/she should register for 3 credit hours of *Doctoral Research Project* (TLT 486). Students are strongly advised not to take other courses while pursuing their data collection and completing their analysis and manuscript report writing of the doctoral research project.

The doctoral research project must be completed **within one calendar year** of approval of the student's project prospectus.

The Final Doctoral Research Project Report

Given the purpose of the doctoral research project discussed above, the final doctoral research project research report should primarily represent the student's work, not the advisor's. The faculty advisor is permitted to see only 2 drafts of the final report before it is submitted to the *ad hoc* committee for final review.

The final report should typically be no more than 5,000 words in length (not including abstract, references, figures, tables, or appendices). The final report may exceed 5,000 words with prior approval from the *ad hoc* committee; the student must provide a justification for a longer word length based on author guidelines for submission to a targeted journal.

The final report must include the following:

- an abstract of between 100 and 200 words;
- an extensive review of relevant literature on the topic, similar in format to the review of literature section of a research article or to the second chapter of a dissertation proposal (typically 30-50 references) and ending with a thorough presentation of the conclusions to be drawn from the literature review, including a synthesis of trends in general findings, major arguments, or schools of thought within that area;
- a clear statement of the research problem related to the topic, including a statement of the relevance of the problem to education;
- a description of the research question(s) investigated in the study (if appropriate) and the research paradigm(s) employed;
- a complete description of the methods employed in the study, including such things as setting, sample, instrumentation, and data analyses;
- a report of the results of the research study and an analytical discussion of the implications of those results, with clear linkages to the research question(s) investigated and the conclusions of the review of the literature;
- recommendations for future research or development activities to extend the research begun in this pilot study.

All components of the paper or research report should follow current APA style.

Completed Project Submission

Once the project advisor has approved the distribution of the final research report, the student should provide digital (electronic) copies to each member of his or her *ad hoc* doctoral research project faculty committee. Project reports should include the title of the project, the student's name, the faculty project advisor's name, and the date clearly marked on the title page. The *ad hoc* faculty committee will need at least two weeks to read and assess the report prior to meeting to discuss their evaluations. The student should be sure to factor in this time when coming up against any deadlines.

Evaluation of the Completed Project

The quality of the doctoral research project should be high enough that it could serve as the basis for an article co-authored by the student and the faculty advisor to be submitted to a refereed educational journal.

Completed projects shall be judged on a PASS/FAIL basis. The TLT Program Director shall notify students in writing of the judgment of the *ad hoc* faculty committee.

A student who fails to complete the doctoral research project within 6 credit hours of registration under *Doctoral Research Project* (or within one calendar year of approval of the student's prospectus) shall be deemed to have failed the project.

Repeating the Project

A student who is judged to have failed the doctoral research project may register a second time to take the project. The same procedures for the doctoral research project shall apply to second attempts at completing the project.

A student repeating the doctoral research project may elect to pursue working with a different faculty project advisor, provided that the student can secure a new project advisor following the procedures for securing an advisor detailed above. Similarly, a faculty project advisor whose student has received a failing evaluation of the project may not be required to work with that student on a second attempt on the project, although the faculty member may so agree if he or she wishes.

Subject to the doctoral research project advisor's approval, a student repeating the doctoral research may elect either to revise the earlier project or start a new project. If a student elects to start a new project, he/she will have to submit a new project prospectus and be approved to pursue that new project as detailed above.

If a student fails the project a second time, he or she will be considered ineligible to pursue a doctoral degree in the TLT program. This does not prohibit the student from pursuing additional coursework, nor does it prevent the student from taking a masters degree.

Under university and college regulations, students who fail the doctoral research project twice may petition to be reconsidered. Their petitions should make clear why the judgment of the TLT faculty should be set aside and why the student should be allowed to attempt a third doctoral research project.

Dissertation Proposal

- A. Soon after the course work begins, and no later than mid-way through the program of study, the student and his/her adviser should begin consultations on a proposal for the student's research. The sooner these consultations begin the better, since the remainder of the student's coursework should be designed in part to prepare him/her to carry out the proposed research. It is the student's responsibility to become sufficiently immersed in his/her field so as to be able to propose research that is both timely and significant. The faculty member who plans to chair the student's dissertation committee files an *Intent to Form a Dissertation Committee* form through the college admissions coordinator. This form is signed by the Department Chairperson.
- B. Students are required to pass their general examination prior to formally proposing their dissertation. However, it is recognized that exceptional circumstances occasionally arise in which students may propose their dissertation prior to passing their general examination. Students need to submit an internal petition through their dissertation chair and the program director to the department chair for variance to this requirement.
- C. It is the student's responsibility to propose research that is of interest to, and can be directed by, the faculty of the program.
- D. When the proposal is sufficiently advanced to be examined by a special committee, the adviser, through the Department Chair, appoints a special committee to examine the proposal and, if that proposal is found acceptable, to act as the student's dissertation committee while the candidate conducts the study. It is the student's responsibility, with the assistance of the adviser, to present his/her proposal to, and acquire the commitment of, prospective committee members.
- E. The following rules govern membership on this committee:
 1. The minimum number of committee members is four and all members must hold a doctoral degree.
 2. Of these, three, including the committee chair, are to be VOTING Lehigh faculty members. With the written approval of the dean of the college, one of the three aforementioned faculty members may be drawn from categories that include departmentally approved adjuncts, professors of practice, university lecturers, and courtesy faculty appointees.
 3. The fourth required member must be from outside the student's department (or outside the student's program if there is only one department in the college).
 4. Committees may include additional members who possess the requisite expertise and experience.
 5. Committee membership must be approved by the University's Graduate and Research Committee; such approval may be delegated to the colleges.

6. No member of the faculty may serve as a chairperson of a special committee unless:
 - The faculty member has served as a special committee member for at least one successfully completed dissertation in Lehigh's College of Education; and
 - The faculty member has an earned doctorate and holds a full-time regular faculty appointment at the rank of assistant professor or above in the Department of Education and Human Services; and
 - His/her training, expertise and/or prior research experience, including his/her own doctoral dissertation, is in alignment with the dissertation proposal of the student, and
 - He/she is already chairing fewer than four doctoral special committees that are active at that time.
7. No member of the faculty may serve as a member of a special committee unless:
 - The research proposal being investigated by the student is in alignment with the training, interest, and expertise of at least one faculty person other than the chairperson; and
 - He/she has an earned doctorate and holds a faculty appointment (adjunct or non-adjunct) in the College of Education. Special committee membership may be granted to persons outside the College of Education or the University where the research proposal being investigated by the student is in alignment with the training, interest or expertise of the proposed member. Approval for all such memberships must be obtained by the program coordinator submitting in writing the proposed member's credentials to the Department Chair for transmittal to the Dean of Education for approval.
- F. When the special committee approves the proposal, the soon-to-be-candidate then prepares it for submission to the Dean of Education. The proposal is submitted to the Dean as part of the student's application for candidacy for the doctoral degree.
- G. The candidate may proceed with the dissertation after having been informed by the Dean of Education that candidacy for the doctoral degree is approved. Although the special committee reserves the right to examine the candidate's progress at any time, it is the candidate's responsibility to monitor his/her own progress and to seek advice from any or all of the special committee when necessary.

Admission to Candidacy

In order to be admitted formally to candidacy for the doctorate, the student must submit an application, a proposed program of study, and a proposal for the dissertation to the Dean of Education for approval. Included in the application is verification of meeting the concentrated learning requirement. The form of the application is prescribed in an instruction sheet available from the Program Coordinator's Office.

Dissertation and Oral Examination

- A. When the dissertation is completed in draft form and approved by and signed by each member of the special committee as being ready for examination, it is submitted to the Dean of Education. The draft should be completed to such an extent that any revisions suggested by the examination be *editorial* in nature and not constitute any *substantial* changes. It is the responsibility of the special committee to withhold approval of the draft until these conditions are met.
- B. After the dissertation draft is approved by the Dean of Education, the Department Chair and the Dean approve the convening of the special committee to conduct the oral examination. That examination is public.
- C. The Chair of the student's special committee is responsible for scheduling the oral examination and must notify the Dean of Education and the faculty of the Education and Human Services Department *at least five working days* prior to the examination. It is the student's responsibility to provide copies of the draft dissertation to examiners and extra copies of the abstract to the program faculty at the time of this announcement. It is the dissertation chairperson's responsibility to withhold scheduling until these documents are made available. In addition, no oral examinations may be scheduled between University Day (May commencement) and the first day of classes in the fall semester. Students wishing to defend during this period can petition their committee for approval. Successful petitions require the agreement of ALL members of the dissertation committee.
- D. The chairperson of the special committee is responsible for coordinating the examination procedures with both the candidate and the examining committee. These procedures may be tailored to suit those involved but must be agreed upon prior to the examination.

- E. The oral examination is primarily the candidate's defense of the work done in connection with the dissertation, as opposed to the writing of the dissertation. It is the responsibility of the special committee to withhold approval of the dissertation draft until it is in such form that the examination can be conducted in this spirit.
- F. The members of the examining committee vote either *Pass* or *Fail* on the oral defense of the written document. They may NOT vote *Abstain* (since they agreed to serve as an examiner) or *Recess* (since the dissertation defense may not be recessed without taking a vote).
- G. At the time of the oral examination, the members of the special committee also provide final approval to the written dissertation. The only two options for this approval are *Approve – no revisions needed* and *Approve – revisions needed*.
- H. A report of the decision on the oral examination is made on a special form provided by the Program Coordinator's office and sent to the Dean of Education.
- I. In the event the candidate does not pass the oral examination, he/she may be granted a second opportunity on the following conditions:
 - 1. Approval is obtained through internal petition to the Department Chairperson and the Dean of the College of Education, and
 - 2. The initial examining committee conducts the second examination, and
 - 3. Rules governing the first oral examination are applied to the second attempt.
- J. In the event that a candidate does not pass this second oral examination, he/she may no longer pursue the doctoral degree. The candidate may be eligible to take a master's degree instead by completing requirements for that degree.
- K. No later than the date published in the University catalog, a finished copy of the dissertation must be deposited with the College Admissions Coordinator (acting for the Dean of Education), in accordance with instructions for the preparation and submission of such documents (see the *Doctoral Dissertations and Master's Theses Preparation/ Submission Guidelines* in the EHS departmental handbook).

DOCTORAL DISSERTATION GUIDELINES

The dissertation must conform to guidelines described in this Proquest document:

www.etsdadmin.com/UMI_PreparingYourManuscriptGuide.pdf

For submission information, visit:

www.lehigh.edu/education/assets/pdf/consolidated_guidelines.pdf

1. Illustrations, tables, graphs, etc., shall be consecutively numbered, so that they may be readily referred to in the text.
2. Your document must provide a *Table of Contents* that provides at least the chapter headings, with page numbers.
3. Your document must include an *Abstract* that summarizes the main findings and conclusions of your dissertation.
4. Each copy of the dissertation must include a "vita" or final appendix that provides a short biography of the Candidate. This shall include institutions attended, the degrees received (with dates), honors and awards, titles, publications, teaching and/or professional experience, and other pertinent information.
5. The signed approval page is NOT submitted electronically to the Lehigh ETD (Proquest).
6. The material of the complete dissertation shall be arranged, numbered, and LISTED IN THE TABLE OF CONTENTS as follows:
 - a. Title Page (which is page i but is not numbered)
 - b. Copyright Page (page ii)
 - c. Unsigned Approval Page (which is page iii)
 - d. Acknowledgments (if any) (*continues with Roman numerals*)
 - e. Table of Contents (*continues with Roman numerals*)
 - f. List of Tables (if any) (*continues with Roman numerals*)
 - g. List of Figures (if any) (*continues with Roman numerals*)
 - h. List of Illustrations, if any (*continues with Roman numerals*)

NOTE: Roman numeral pagination ends here.

 - i. An Abstract of 350 words maximum (*numbered with Arabic numeral 1*)

NOTE: Arabic numeral pagination starts with the Abstract at page 1 and is continued in consecutive order to the last page of the dissertation.

- j. Main text of the dissertation, including footnotes, tables and figures
 - k. Bibliography or List of References
 - l. Any Appendices
 - m. Candidate's "vita" or brief biography (last page)
7. Doctoral dissertations are limited to 400 pages.
NOTE: Manuscripts exceeding this limit will be returned for abridgment.
 8. ALL pages of the entire dissertation, including illustrations, tables, graphs, appendices, bibliography, shall be numbered. It is important that every page (except the title page, as noted above) be numbered using the appropriate Roman or Arabic numeral.
 9. Please consult with your adviser on the APPROPRIATE PUBLICATION STYLE TO USE.
NOTE: You MUST maintain consistency in using the SAME ONE style throughout your dissertation.

ELIGIBILITY CRITERIA FOR PARTICIPATION IN UNIVERSITY DOCTORAL HOODING CEREMONY

Purpose: The doctoral hooding ceremony takes place on the weekend prior to the May commencement exercises and recognizes the Ph.D. recipients with the traditional bestowing of the doctoral hood. This policy defines the criteria that determine which students are eligible to participate in the doctoral hooding ceremony.

Eligibility: A student may participate in the doctoral hooding ceremony if he or she meets any ONE of these criteria. To preserve the integrity and dignity of the ceremony, there will be no exceptions.

1. The student has completed ALL requirements for the Ph.D. and is cleared by the Registrar for graduation in the May commencement exercises.
2. The student received his or her Ph.D. on one of the *preceding* fall or winter degree-granting dates.
3. The student has completed ALL requirements for the Ph.D. except for a required internship that will be completed before August 31 in the same year as the hooding ceremony (that is, roughly three months after the hooding ceremony). In this case, the dissertation must be defended, signed, and submitted to University Microfilms by the close of business on the last day of classes in the spring semester prior to the hooding ceremony.

Such students must petition the Standing of Graduate Students Committee (SOGS) for permission to participate, and SOGS will determine whether the student's circumstances meet the eligibility criteria. The petition must be submitted to the Registrar at least 10 days prior to the May Commencement.

UNIVERSITY DISSERTATION AWARDS

There are two university-related dissertation awards that are awarded annually, the *Elizabeth V. Stout Dissertation Award* and the *Council of Graduate Schools/ University Microfilms International Distinguished Dissertation Award*.

One Stout Dissertation Award may be awarded in each of the four colleges each year to recognize significant scholarly achievement in a dissertation project. Stout Dissertation Awards are university-level awards, selected by the colleges. Recipients receive an honorarium, a citation, and recognition at the doctoral hooding ceremony.

Each year the university nominates outstanding dissertations for consideration for the Council of Graduate Schools/University Microfilms International Distinguished Dissertation Awards (CGS/UMI awards) in an appropriate discipline, based on the CGS schedule for recognition in specific discipline areas. CGS follows a two-year cycle in four discipline areas, recognizing two discipline areas per year.

In odd-numbered years, one award is presented in *Humanities and Fine Arts (including history and literature)*, and one award is presented in the *Biological and Life Sciences*. In even-numbered years, one award is presented in the *Social Sciences (including Education)*, and one award is presented in *Mathematics, Physical Sciences, and Engineering*.

For details on eligibility, the program nomination process and selection criteria and processes, please see the *COE Graduate Student Handbook* (available online at:

<http://coe.lehigh.edu/content/current-student-information>).

Lehigh University Graduate Petitions

Students wishing to petition, use the official university *Graduate Petition* form (available online at: https://coe.lehigh.edu/sites/coe.lehigh.edu/files/LU_GradStudentPetitionForm.pdf).

This PDF document allows the petitioner to check various types of requests, or check OTHER and then describe his or her request in 50 words or less. The petitioner has approximately 200 words to describe the reason(s) why what he or she has requested should be granted. Once again, the petitioner enters this text directly into the PDF form. Alternatively, the petitioner may prepare the text in a word-processing document and then cut-and-paste the text from that document. If the petitioner needs more than 200 words, he or she may note that fact on the form and then print out an additional page and attach it.

Whenever possible, however, the petitioner should make his or her *very best* effort to use the PDF and not attach additional pages. This environmentally conscious approach not only reduces use of paper, it is also more efficient.

The petitioner may save the form to his or her computer and complete it in several sessions. Once the petitioner has completed the form, he or she prints out a copy for distribution to obtain the necessary signatures and recommendations.

The *Graduate Petition* form notes the exact nature of required documentation and the petitioner, as well as those faculty and administrators who subsequently consider the petition, should be certain to include that required documentation. Otherwise, the petition will likely be tabled until such documentation is provided. This will delay a petition by at least two weeks and can lead to a petition being denied for lack of documentation if that documentation is not provided in a timely fashion after the petition is tabled.

Faculty may attach additional printed pages to make clear why they support or oppose the petitioner's request. Each faculty or administrative signer must either recommend *approve* or *deny*. Signers are, however, allowed in their comments to make clear any reservations they have in supporting the petitioner.

Petition-consideration Process

1. A student obtains a petition form and (1) checks the appropriate boxes for what action he/she wants taken ["I respectfully request: ..."] **and** (2) enters text telling why that action is more appropriate than the action already taken ["Reasons: ..."]. The student fills out the top of the petition, entering contact information, prints the form and then signs and dates it.
2. The signed form then goes to the student's academic adviser. That adviser reviews the petition, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
3. The doubly signed form goes next to the graduate coordinator who reviews the petition and any attachments, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
4. The triply signed form next goes to the department chair who reviews the petition and any attachments, makes a recommendation ["Approve" or "Deny"], provides any justification for his/her recommendation and then signs and dates the form.
5. Now carrying four signatures, the petition form goes to the dean's office where the associate dean reviews the petition and any attachments, makes a recommendation ["Approve," "Deny" or "Defer to SOGS"], provides any justification for his/her recommendation and then signs and dates the form. [Associate deans recommend "Defer to SOGS" when they feel there may be cross-college issues that should be discussed before making a recommendation.]
6. The petition leaves the college at this point and goes down to the registrar's office. The registrar reviews the petition and any attachments, checks the student's record for any additional relevant information, and determines if the petition is covered by a recent precedent by the Committee on the Standing of Graduate Students (SOGS). If so, the registrar acts on the petition based on that precedent. If not, the registrar distributes the petition electronically to all members of SOGS and schedules it for discussion at the next SOGS meeting.
7. The SOGS committee meets every other week, including some meetings in the summer, and typically considers between four and 12 petitions at each meeting. Each petition is discussed and carefully considered and the committee votes to *approve*, *deny*, or *table* the petition.
8. If a petition is tabled, the graduate associate dean from the petitioner's college notifies the department/program of that fact and requests the missing documentation. A petition may remain on the table for *no more than two meetings*; if the requested documentation has not been supplied by then, the petition is automatically denied.

9. If the committee decides to *approve* or *deny* the petition, the registrar's office notifies the petitioner of the decision of the committee.
10. If a petitioner is not satisfied with this decision, he or she may appeal to the Graduate and Research Committee (GRC). This appeal should be in the form of a letter to the GRC that the student delivers to the chair of the GRC. In this letter, the student should make clear (1) what action he or she wishes taken instead of the action taken by SOGS, (2) why the action taken by SOGS was inappropriate, and (3) why the requested action is the more appropriate action. For more details, visit: <http://www.lehigh.edu/~indost/conduct/handbook/sect4.shtml>
11. The GRC as a whole considers the student's appeal and issues its decision.

Graduation Activities

- A. In order to be eligible to receive the doctoral degree, a student must have met ALL of the following conditions:
 1. Completed the required program of study, including the minimum credit degree requirement (either 72 or 48 credits);
 2. Passed the doctoral qualifier;
 3. Fulfilled the concentrated learning requirement;
 4. Passed the general examination;
 5. Been approved for candidacy;
 6. Passed the dissertation oral examination (defense);
 7. Completed all committee-required modifications to the dissertation;
 8. Complied with all electronic requirements for preparing and submitting that dissertation;
 9. Owes no outstanding debts to the university; and
 10. Been cleared by the Registrar.
- B. Students who meet (or expect to meet) all of the above requirements MUST APPLY for the degree by the deadline dates published in the University Catalog.

Advisement, Registration, and Regulations

- A. Advisement
 1. The director of the academic program through which the student is admitted to graduate standing appoints a member of the faculty in the student's major field to advise the student on the program and support that student's registration for courses.
 2. The director of the academic program that accepts a student for doctoral study establishes a file for the official credentials, records, and correspondence which relate to that student. This student file is a program file.
 3. The value placed on prior professional experience and course work of each doctoral student is determined by the faculty of the program in which the student is enrolled.
 4. The program of study for each doctoral student is developed by the student in consultation with his or her faculty adviser, in keeping with the curricular decisions of the faculty of that academic program.
- B. Registration
 1. A student that is registered full-time may take no more than 15 credit hours concurrently. A student holding a TA, RA, or GA appointment entailing 20 hours of effort per week (labeled as a *half-time appointment*) is limited to taking 10 concurrent credit hours. Students holding an appointment entailing less than 20 hours of effort per week are

not so limited, although –like graduate students who are employed elsewhere and can give only part of their time to graduate work—they should restrict their academic loads accordingly.

2. Students are expected to register-before the first day of classes. After the first day of classes, late registration or registration changes are permitted only by petition to the Registrar and a late fee is charged. Generally, registration is refused after the 15th day (8th day in summer).
3. All students using Lehigh University resources MUST be registered. A student must be registered in the semester in which the degree is conferred.
4. If a student *wishing to be certified as a full-time student* (see next section) reaches the “minimum degree registration” requirement for his or her program of study prior to formal admission to doctoral candidacy, that student must maintain continued registration of at least three (3) credits per semester in fall and spring until the committee has approved the dissertation proposal and he or she is admitted to doctoral candidacy. If the student has completed all required coursework, he or she traditionally registers for 3 credits of dissertation.

This “minimum degree registration” requirement differs, according to the student’s academic level prior to initial admission to the doctoral program: For students admitted to the doctoral program after completing their bachelor’s degree, the minimum is 72 credits. For students admitted after completing their master’s degree, it is 48 credits.

5. After admission to doctoral candidacy, regardless of whether a student wishes full-time student status, that student MUST maintain candidacy by registering at least two times each calendar year (in both fall and spring semesters or in either fall or spring semester plus one summer session). After completion of the minimal registration requirement plus any additional requirements of the student’s department or program, students may register for one credit hour of ‘Maintenance of Candidacy’ (MOC).

C. Full-time Student Status

1. Certification as a full-time student is based on where a student is in his or her program of study. Full-time status has important legal implications, including affecting visas, loan repayment schedules and the university’s IRS status.
2. Students who require certification as full-time students must complete the appropriate form at the start of EVERY fall and spring semester.
3. In order to qualify for full-time student status, a student normally must be registered for at least nine (9) credits in a semester. As noted on the full-time student status certification form, however, there are specific circumstances under which a student carrying fewer credits may be certified as full-time.

D. Time Limits (*Time-to-degree Clock*)

1. A student’s time-to-degree clock begins with the *first* course to be counted toward that degree.
2. All work beyond the Master’s degree to be counted toward the doctorate must be completed within a seven-year period after commencing graduate study.
3. Extension of the time limit is granted only for good cause, such as serious health or personal issues or military service. Approval of such an extension is through the petition process and will only be granted in cases where there is support from the doctoral adviser, program director, department chair and associate dean. This petition MUST include: (1) a clear rationale for why the student has been unable to complete the degree within the allotted time; (2) a detailed description of the student’s new timeline for degree completion, including all key doctoral milestones; and (3) a statement of support from the doctoral adviser, endorsing the fact that the new timeline is reasonable *and* confirming the adviser is confident the student can finish within that timeline.
4. A student who encounters challenges to completing his or her doctoral degree that are outside his/her control -- such as job changes, health or personal issues and the like-- may petition for *up to a total of two years* of leave of absence. If granted, such leaves automatically extend the student’s time-to-completion clock by the amount of the granted leave and a student already admitted to candidacy is not required to register for maintenance of candidacy while on leave.

Whenever possible, students should apply for such leaves *prior* to taking time away from doctoral study, although

in unusual circumstances, a student may apply for such a leave retroactively. Students on leaves of absence are NOT ALLOWED to register or to work with faculty on doctoral work or completion of required doctoral tasks.

E. Concentrated Learning

1. Each Ph.D. candidate must satisfy Lehigh's concentrated learning requirement. This requirement is intended to ensure that doctoral students spend a period of concentrated study and intellectual association with other scholars. To fulfill this requirement, the student must complete either two semesters of full-time Lehigh graduate study or 18 credit hours of Lehigh graduate study, either on or off campus, within a fifteen-month period.

F. Withdrawals and Incompletes

1. Course withdrawals with a grade of W are permitted only during the first nine weeks of classes during the regular academic year. During a summer session, such withdrawals must occur before half of the session has elapsed. After these points, instructors may assign a mark of either WP or WF, depending on the performance of the student in the course to that point.
2. If the student withdraws from all courses, the withdrawal must be processed through the College of Education Graduate Admission Office to the Registrar.
3. Graduate students have one calendar year to remove an incomplete unless an earlier deadline is specified by the instructor. Incomplete final marks that are not removed within one year, either devolve to the parenthetical mark originally submitted by the instructor or to an F if no such parenthetical mark was submitted. One exception to this timeline is removal of incompletes in courses designated as research courses. Such courses maintain the N mark until such time as the instructor submits a *Change of Final Mark* form.

G. Academic Performance Expectations and Policies

1. Doctoral students are governed by university, college and academic program policies related to academic performance. College policies may be more stringent than university policies and academic program policies may be more stringent than college policies.
2. Applicable college policies related to student academic performance are described in the *Education and Human Services Department Handbook* and include:
 - College Policy on Adequate Academic Progress
 - College Academic Integrity Policy
 - Academic Scholarship Requirements for College of Education Programs
3. In addition, students should review the program manual for their academic programs to identify any relevant program policies related to program expectations and requirements for student academic performance.

Other Academic Programs

Other academic programs in Teaching, Learning, & Technology include an *Education Minor* in the College of Arts and Sciences aimed at **helping undergraduates** learn more about teaching and learning, a 12-credit *Technology Use in the Schools* certificate program designed to **help teachers and other school professionals** develop the knowledge, skills, and abilities needed to integrate instructional technologies into teaching and learning effectively, and a 12-credit *Project Management* certificate program. Each is described in more detail below.

Education Minor

15 credits

The Education minor is a fifteen (15) credit hour program offered to Lehigh undergraduates. Education Minor courses count toward your bachelor's degree. Minors must be submitted by the end of the student's FIFTH semester. When the Education Minor courses are completed satisfactorily, a minor field will be recorded on the student's academic record. The minor will not appear on the diploma.

Program of Study

Complete 15 credits from the following			
Course No.	Course Title	Credits	Semester Taken
TLT 367	Environmental Education	3	
TLT 368	Teaching and Learning with Geospatial Tools	3	
TLT 380	Child Development and Cognition	3	
TLT 394	Special Topics in Education	3	
TLT 404	Diversity, Families, and School Collaboration in K-12	3	
TLT 411	Early Childhood Education	3	
TLT 458	Intro to Multimedia Programming and Resource Development	3	
TLT 462	Special Topics in Development of Instructional Resources and Technology for Learning (subtitle)	3	
TLT 470	Technology for Teaching and Learning	3	
CIE 400	Comparative and International Education	3	
CIE 401	Globalization & Contextualization	3	
CIE 403	Globalization and Curriculum Implications	3	
CIE 404	Issues and Institutions in International Education Development	3	
CIE 405	Experiencing the United Nations: NGOs in Education Policy & Practice	3	
CIE 406	International Education Policy	3	
SpEd 332	Education and Inclusion for Individuals with Special Needs	3	
EDUC XXX	College of Education Elective (with permission of course instructor, advisor, and TLT Program Coordinator)	3	

Additional Notes:

- **Education Minor Declaration Form:** After your Education Minor Declaration Form has been approved by the TLT Program Director, you will receive a copy. *Please keep this copy for your records.*
- **Graduate Course Clearance for Undergraduates:** Undergraduate students must get permission to register for graduate-level courses each semester. A minimum cumulative GPA of 2.75 is required for undergraduates to be cleared to take graduate education courses. Your College of Education advisor can help you plan your classes and process your Education course clearance(s). You will be sent an email when you have been cleared to register for your class(es). A maximum of 6 Education credits may be taken per semester while enrolled as an undergraduate student.
- **Clearances:** Upon the approval of your Education Minor Declaration Form, education minors must submit all of the following clearances:
 - Mantoux Tuberculosis Screening or chest X-ray
 - FBI Federal Criminal History Record (Act 114)
 - Pennsylvania State Police Criminal Records Check (Act 34)

- o Pennsylvania Child Abuse History Clearance (Act 151)

Before the education minor will be placed in the schools as part of his/her certification or degree program, the Mantoux or chest X-ray must be **negative** and all 3 required criminal background checks must indicate that “**no record exists.**” These forms must be renewed yearly while pursuing your education minor. Forms are available from the TLT Program Coordinator. Additional information about our clearances policy can be found in the “Policies” > “Clearances” section, above.

Technology Use in the Schools Certificate Program

(12 credit hour minimum)

The 12-credit *Technology Use in the Schools* certificate* program is aimed at post-certification inservice teachers, informal educators, and others seeking to expand their pedagogical skills and knowledge of instructional technology.

Students enrolled in the 12-credit Technology Use in the Schools certificate program will learn best practices in how to implement and integrate new and emerging instructional technologies to enhance learning outcomes in a variety of school settings and informal learning environments.

Students in the program pick 4 courses (3 credits each) from among the following:

- TLT 367. Environmental Education (3)
- TLT 368. Teaching & Learning with Geospatial Tools (3)
- TLT 401. Overview of Teaching and Learning (3)
- TLT 403. Instructional Design (3)
- TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3)
- TLT 460. Advanced Multimedia Programming and Resource Development for Learning (3)
- TLT 462. Special Topics in Development of Instructional Resources & Technologies for Learning: <Subtitle> (3)
- TLT 470. Technology for Teaching and Learning (3)
- TLT 476. Assessment of Instructional Technologies (3)
- *Other electives as approved by advisor (0-3)*

Clearances: Depending upon the specific courses you choose or research activities you engage in while pursuing your Technology Use in the Schools’ certificate program, it may become necessary to obtain proper school placement clearances in accordance with Pennsylvania Department of Education regulations.

Listing of Courses Offered

TLT 367: Environmental Education (3) Introductory environmental education course designed to prepare students to implement environmental education opportunities in formal and non-formal education settings. Topics include history and philosophy of environmental education, environmental laws and regulations, GIS, environmental issues and decision making, curriculum integration and environmental education teaching methodologies. This is a Web enhanced course containing both online and fieldwork components

TLT 368: Teaching & Learning with Geospatial Tools (3) Exploration of geospatial tools, including but not limited to global positioning systems (GPS), geographic information systems (GIS), and related visualization tools (e.g., Google Earth). Application of these tools and techniques to instructional settings, including appropriate pedagogy and assessment.

TLT 380: Child Development and Cognition (3) Introduction to physical, motor, perceptual, cognitive, language, emotional, social, and gender development of young children and adolescents. Developmental history, theories, and research, as well as the effect of culture, family, peers, media, and schooling on the individual and groups. Students investigate typical and atypical development and explore the implications of individual differences for teaching and learning, with an emphasis on evidence-based instructional practices designed to optimize the growth and development of all learners. Explores mental health issues and at-risk students.

TLT 391: Workshops (1-3) Cooperative study of current educational problems. Provides elementary, secondary, and special education teachers an opportunity to work at their own teaching levels and in their own fields. Limited to six credits during a summer session but the student may register for more than one workshop provided there is no duplication in subject matter.

TLT 394: Special Topics in Education: (with subtitle) (1-3) Examination of a topic of research or professional interest in education. Subtitle will vary. May be repeated for credit as subtitle varies.

TLT 401: Overview of Teaching and Learning (3) Foundations and key concepts in learning and instructional theory. Cognition and brain-based research with a focus on innovations in teaching and learning.

TLT 402: Critical Reading and Writing (3) Using literature to build persuasive written arguments. Searching and identifying promising sources, distilling research findings, synthesizing literature to support an argument, and organizing written materials to enhance persuasiveness. Suited to those writing qualifying projects, dissertation proposals, dissertations, funding proposals, conference proposals, and journal articles.

TLT 403: Instructional Design (3) Social, cognitive, and environmental factors in designing for teaching and learning. Systems theory applied to learning settings. Special emphasis on motivational theories and technological affordances. Prerequisite TLT 401 or POI

TLT 404 (SpEd 404): Diversity, Families, and School Collaborations in K-12 (3) Cultural and linguistic diversity as critical variables in educational equity for all learners, including ELL. Explores home-school partnerships, family and professional collaboration, and teacher self-awareness. Implementing culturally sensitive and responsive classroom practices as well as forming collaborative relationships with families that respect diversity of family contexts. Collaborative, multidisciplinary teaming to support, optimize, and advocate for student's educational needs and connect to community services and resources available to individuals and families. Addresses family mental health issues and wraparound services.

TLT 405 (SpEd 405): Principles and Applications of K-12

Assessment (3) Assessment applied to learning in classroom learning environments, including universal screening and progress monitoring. Discusses assessment approaches, ways to implement assessment, and use of assessment tools to monitor all students, including ELL and students with disabilities. Use of data-management and grading systems. Addresses diagnostic assessments for student placement and analysis of assessment data to tailor instruction to diverse student needs. Emphasis on research-based practices of assessment to inform instructional decision-making consistent with the RtII framework.

TLT 407: Instructional Design for K-12 Classrooms (3)

Introduces the systematic design of instruction following the Response to Instruction and Intervention (RtII) and Universal Design for Learning models. Explores theories of learning and instructional applications as a part of technology-based and standards-aligned classroom education grounded in the use of a quality, research-based core curriculum and effective instructional practices to meet the needs of all learners. Addresses appropriate use of instructional technologies for universal learning. Students will plan, design, and develop student-centered, standards-aligned, technology-supported instruction and appropriate learner assessments.

TLT 409 (SpEd 409): K-12 Classroom Environment and

Management (3) Designing inclusive classroom environments that maximize learning. Emphasis on fostering a community of learners using connections among classroom arrangement, classroom management, and cognitive development to create positive learning outcomes for all students, including ELL learners and students with disabilities. Addresses the tiered model of prevention and positive behavior support, including the role of functional assessment and individual positive behavior support plans in classroom management. Highlights the ways a positive climate for learning involves establishing and maintaining partnerships with families.

TLT 410: The Writing Process (3) Developmental characteristics of children's writing and relationships among writing, spelling and reading. Predictors of writing achievement, teaching strategies and activities, and evaluation schemes will be emphasized, K-12.

TLT 411 (SpEd 411): Early Childhood Education (3) Introduction to development of early childhood education in the U.S. Emphasizes evidence-based methods and materials to assist young children in the learning process, including arrangement of indoor/outdoor space, developmentally appropriate practices, and the design of instruction to foster young children's emotional, social, language, cognitive, physical, and creative development. Includes embedded instruction and adaptations for students with identified disabilities, children at risk for developing disabilities, and children with culturally and linguistically diverse backgrounds, and family collaboration within the instructional planning process.

TLT 412: Social Studies in PreK through 4th Grade (3) Overview of Pennsylvania's PreK-4 Standards for social studies, including: Pennsylvania history, United States history, economics, civics and government, citizenship, political science/government, and geography. Development, implementation and evidence-based assessment of preK-grade 4 social studies curricula. Effective teaching techniques such as lesson planning, inclusive practices, integrating instructional technologies into instruction, reflecting on teaching, and the latest research-based teaching and assessment methods. Emphasis on alignment of instruction with standards.

TLT 420: Reading and Literacy in PreK through 4th Grade. (3)

Methods of teaching reading and literacy in preK-4, including critical components of early literacy. Selection of appropriate materials, instructional strategies, techniques, and formative and summative assessments. Best practices in reading instruction in a standards-aligned curriculum, explicit strategies for teaching vocabulary and

comprehension, and using evidence-based practices to teach reading to learners at all levels of proficiency. Helping learners make the transition from learning to read to reading to learn. Working with families and non-school support services to enhance reading development.

TLT 422: Language Arts in PreK through 4th Grade (3)

Principles of language learning and the development of communication skills from preK-4. Implications of developmental differences and experiences in non-school settings on student readiness and skills. Helping parents support their children's language skills development. Methods of teaching listening, speaking, and writing, including spelling, punctuation, grammar, and handwriting. Selection of appropriate standards-aligned materials, textbooks, assessments, and evidence-based approaches to teach the language arts to learners from a variety of backgrounds and across a range of abilities.

TLT 424: Children's Literature in Elementary Education (3)

Role of literature in the instructional program of the elementary schools. Use of trade books for individualized instruction in reading, language arts, mathematics, science, and social studies.

TLT 426: Science in PreK through 4th Grade (3) Overview of inquiry-based activities and investigations to promote science learning in preK-grade 4 classrooms. Emphasis on Pennsylvania's PreK-4 Standards for Science and Technology and Environment and Ecology standards and aligning instruction with standards. Course activities include planning effective lessons, trying out new methods of teaching, reflective practice, inclusionary methods, and integrating instructional technologies into science learning. Evidence-based assessment types are highlighted within instructional contexts.

TLT 428: Mathematics and Numeracy in PreK through 4th Grade (3)

Trends, theories, activities and manipulative materials for teaching early numeracy and elementary mathematics. Pre-school development and in-school skills and concepts, including sets, systems of numeration, experience with numbers, number operations and concepts, numerals, measurement, early algebra, and elements of geometry. Implications of developmental differences and early non-school experiences on learner readiness and skills. Helping parents support their children's mathematics conceptual development. Research-based practices and inclusionary approaches to teach mathematics to learners from a variety of backgrounds and across ability levels.

TLT 431: Social Studies in Middle Level and High School Education (3)

Middle and high school curriculum, content, teaching strategies, and instructional materials for the social studies. Emphasis on organizing content, using appropriate methods, testing and evaluation, and appropriate integration of technology. Overview of Pennsylvania's 4-8 and 8-12 standards for social studies and related standards from the National Council for the Social Studies and other national organizations. Explores relevant research, courses of study, textbooks, and teacher-made materials. Addresses inclusive evidence-based and standards-aligned instructional approaches and techniques, including co-teaching.

TLT 432: Reading and Critical Thinking in Middle Level and High School Education (3) Development of reading in the secondary content areas (English/language arts, mathematics, science, social studies). Highlights effective teaching strategies in critical areas, such as higher order reading and study skills. Addresses analysis of evidence based methods and current research for improving the reading development and analytical skills of all students.

TLT 434: English in Middle Level and High School Education (3)

Curricula, philosophy, methods, strategies, and materials for the teaching of middle and high school English. Literature, genres, and the nature of text and text differences. Critical analysis and drawing inferences from narrative text and poetry. Techniques for teaching and enhancing writing in various styles. Applications of technology

and assessment principles. Addresses inclusive evidence-based and standards-aligned instructional approaches and techniques, including co-teaching.

TLT 436: Science in Middle Level and High School Education (3)

Overview of inquiry-based activities and investigations to promote science learning in secondary science classrooms. Emphasis on aligning instruction with Pennsylvania's Standards for Science and Technology and Environment and Ecology standards. Course activities include planning effective lessons, trying out new methods of teaching, inclusionary methods, reflective practice, and integrating instructional technologies into science learning. Evidence-based assessment types highlighted within instructional contexts.

TLT 438: Mathematics in Middle Level and High School Education (3)

Standards-based and technology-intensive curricula, instructional activities, and manipulative aids for mathematics in middle level and high schools. This course models and explores an investigative and hands-on approach to secondary mathematics instruction. Particular attention given to learning theories, curriculum issues, and recommendations arising from state, national, and international assessments. Research-based practices and inclusionary approaches to teach mathematics to learners from a variety of backgrounds and across a range of abilities. Addresses standards-aligned instructional approaches and techniques, including co-teaching.

TLT 440: Pre-professional Seminar (3)

Study, directed observation of, and initial practice in the various phases of teaching in secondary schools. Guided opportunities to try out strategies to facilitate the inclusion of special education students, differentiated instructional practices, and standards-aligned and evidence-based instructional approaches in actual school settings. Prerequisite: consent of the program director.

TLT 442 (SpEd 442): General Education and Special Education Student Teaching and Seminar (1-6)

Intensive practice in the application of principles of teaching for both general and special education settings in a supervised internship in the schools (for dual certification). Regular meetings among student teachers for critical analysis and discussion of classroom instructional practices, as illustrated by the student teachers' experiences in the schools. Practical mentoring on professionalism, applying differentiated instructional models in real-world setting, and aligning instruction with standards. Prerequisite: consent of the program director.

TLT 444: General Education Student Teaching and Seminar (1-6)

Intensive practice in the application of principles of teaching for general education settings in a supervised internship in the schools. Regular meetings among student teachers for critical analysis and discussion of classroom instructional practices, as illustrated by the student teachers' experiences in the schools. Practical mentoring on professionalism, applying differentiated instructional models in real-world setting, and aligning instruction with standards. Prerequisite: consent of the program director.

TLT 454: Applied Instructional and Interface Design Principles (3)

Exploration and application of design models for learning. Special emphasis on the application of perception theory, communication theory, and learning theory to the design of media for teaching and learning. Prerequisite: TLT 403 or POI.

TLT 456: Instructional Design and Development Studio (3)

Studio-based, authentic and collaborative design experiences led by a faculty mentor. Students work in teams to complete substantial multimedia design and development projects. Prerequisites: TLT 454 and TLT 460 or POI.

TLT 458: Introduction to Multimedia Programming and Resource Development for Learning (3)

Introduction to programming and resource development tools used in the creation of interactive multimedia teaching and learning materials.

TLT 460: Advanced Multimedia Programming and Resource Development for Learning (3) Advanced exploration of programming and resource development tools used in the creation of interactive teaching and learning materials. Prerequisite: TLT 458 or POI.

TLT 462: Special Topics in Development of Instructional Resources and Technologies for Learning (subtitle) (1-3) Focus on using advanced Website and digital resource development-and-manipulation tools to create multimedia learning materials. Topics will vary (for example, Database-Driven Web Development; Assistive Devices for Special Populations; Programming Handheld Devices; Multimedia Resource Development; Media Production for Instructional Programming). May be repeated for credit under different subtitles. Prerequisite: TLT 460 or POI.

TLT 466: Field Experience: General Education Certification (1-3) Intensive practice in the application of principles of teaching in general education in a supervised experience in the schools for students who already hold special education certification. Practical mentoring on professionalism, applying differentiated instructional models in real-world setting, and aligning instruction with standards. Pre-requisite: Consent of the program director.

TLT 470: Technology for Teaching and Learning (3) Analysis of available technologies (hardware, software, and Web resources), and identification of technologies matched to learner needs in traditional and/or non-traditional settings.

TLT 474: Large-scale Planning and Implementation of Educational Technology (3) Addresses topics such as planning, maintaining, funding, networking, staffing, staff development, and monitoring of educational technology implementations.

TLT 476: Assessment of Instructional Technologies (3) Techniques for evaluating technology implementations for teaching and learning. Focus on topics such as instrumentation, data collection and analysis, drawing conclusions from data sets, and preparing reports for stakeholders.

TLT 480: Curriculum Theory and Design (3) Curricular models and their features, with a focus on curriculum development and enactment. Special emphasis on design principles, curriculum's role in K-12 settings, and technology-enhanced curriculum.

TLT 486: Doctoral Research Project This course provides students with the opportunity to design and conduct research studies under the supervision of specific faculty.

TLT 492: Classroom Research Methods (3) Introduces students to classroom research design paradigms and the assumptions behind them, use of the literature, developing research questions, qualitative and quantitative procedures, research design, sampling design, data collection, data analysis, and reporting research results using educational applications.

TLT 494: Culminating Research Project (3) Designing and conducting research projects in classroom settings.

TLT 499-10: Dissertation (1-15)

TLT 499-11: Maintenance of Candidacy (1)

Educ 493-11 Internship in Teaching, Learning & Technology (1-6) Opportunity for students to apply theory to practice in a variety of educational settings. Students will be supervised in the field and participate in seminars dedicated to addressing specific concerns and issues encountered during their experience. Prerequisite: consent of the program director.

Educ 494-11 Field Work in Teaching, Learning & Technology (3) Identification of significant problems in an educational environment, review of the literature, and development of appropriate research plans.

Educ 495-11 Independent Study in Teaching, Learning & Technology (1-6) Individual or small group study in the field of specialization. Approved and supervised by the major adviser. May be repeated.

TLT Faculty and Staff

Contact Information

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Information about TLT Program Personnel

Faculty



Alec Bodzin, Ph.D. (North Carolina State University, 1999)
Professor of Education

Dr. Bodzin's research interests include the design of Web-based inquiry learning environments, the design and implementation of inquiry-based science curriculum, and the implementation on visual instructional technologies to promote spatial thinking skills. He has developed constructivist Web-based learning instructional systems including projects involving inquiry-based explorations of scientific processes and issues in earth and environmental science. Dr. Bodzin has also been actively involved in the assessment of Web-based science instructional activities. Dr. Bodzin has taught science in secondary schools in Columbia, SC, Fairfax County, VA, and on Tarawa Island in Kiribati as a Peace Corps volunteer.



Ward Mitchell Cates, Ed.D. (Duke University, 1979)
Professor of Education and Associate Dean of the College

Dr. Cates' research interests include a) how learners process information and which factors or elements in the technology-based products they use influence these processes and the success of their outcomes and b) how we design and implement new instructional materials to make the most of new technologies without allowing those technologies' limitations to determine the effectiveness of the instruction. Prior to coming to college teaching, Dr. Cates was first a teacher of "learning disabled/emotionally disturbed" middle schoolers and then a high school English teacher. On a sabbatical a number of years ago, Dr. Cates returned to the public schools, teaching language arts in the elementary school for one month at each grade level (K-5).



H. Lynn Columba, Ed.D. (University of Louisville, 1989)
Associate Professor of Education

Dr. Columba has taught 14 years in public schools in K-12 classrooms, three years at the University of Louisville, and 15 years at Lehigh University. Presently, she coordinates the Teaching, Learning, and Technology Program in the College of Education. On a weekly basis, she coaches and mentors teachers in classrooms in Lehigh Valley area schools in order to help students make mathematics meaningful. In spring, 2005, she published her first book, *The Power of Picture Books in Teaching Math and Science: PreK-8* (co-authored with C. Kim and A. Moe). She enjoys sharing the beauty of mathematics with her students through hands-on activities.



Scott R. Garrigan, Ed.D. (Lehigh University, 1993)
Professor of Practice

Dr. Garrigan brings a broad base of experience in education and technology to his teaching and research. His interests center around understanding and strengthening the cognitive basis for learning, particularly through the affordances of technology.



Thomas C. Hammond, Ph.D. (University of Virginia, 2007)
Associate Professor of Education and TLT Program Director

Dr. Hammond explores the opportunities for technology-supported social studies instruction. He is especially interested in student-created multimedia and its potential for improving student learning outcomes. While at the University of Virginia, he was a designer, developer, and researcher of PrimaryAccess, a web-based documentary-maker that allowed students and teachers to work with archival images and create short digital movies.



Dr. L. Brook Sawyer, Ph.D. (University of Virginia, 2003)
Assistant Professor of Education

Dr. Sawyer's work promotes the developmental outcomes of children ages birth through five who are at risk for later school failure, including children with disabilities and English Language Learners (ELLs). She examines ways to enhance the interactions between children and parents, who are their children's most proximal influences, to support children's learning and development. My first line of research is situated in early intervention which provides services to children with disabilities, who are birth to three years of age, and their families.

Staff



Donna Toothman
Program Coordinator

Donna is the font of all knowledge for the TLT program. She has worked at Lehigh for over 25 years and for more than 15 as program coordinator for TLT.

Applying for PDE Certification through the Teacher Information Management System (TIMS)

The Pennsylvania Department of Education (PDE) now requires that you apply for your Instructional I certificate using their online TIMS process. You will no longer submit paperwork to your program. Instead, the new four-step process for applying for your certification is outlined below.

Four Steps in the Process to Apply for your PDE Certificate

You complete steps #1-2, the Office of Teacher Certification and Field Placements (OTC) completes step #3, and PDE completes step #4.

YOUR JOB (to be done in this order):

1. Confirm with your program coordinator that you have completed all requirements for the certification you seek and that all documentation is on file with her.
2. Create your TIMS application at
<http://www.portal.state.pa.us/portal/server.pt/community/certifications/7199>

Please note: You cannot begin a TIMS application until the first of the month in which you will complete all of your requirements for certification. When you see “Conferred Date,” insert the date on which you completed all requirements for certification. If you’re not sure of this date, you can confirm it with your program coordinator.

THE OTC’s JOB:

3. The OTC will verify program completion and recommend you for certification to PDE.

PDE’s JOB:

4. PDE makes your certificate(s) available through TIMS in roughly 11 weeks. You must go in to TIMS to print your certificate(s). PDE will not mail them.

If You Need Assistance

If you need assistance, you might want to (1) refer to the “Applicant User’s Guide” at

<http://www.portal.state.pa.us/portal/server.pt/community/tims - teacher information management system/20476/page/1040213>

or (2) call PDE’s Division of Certification Services at 717-787-3356. The phones are not answered on Tuesday, and unfortunately you should expect a long wait when you do call.