The VT Graduate School and the Graduate Curriculum Committee (GCC) have prepared this document to assist faculty and departments in preparing a course or graduate certificate proposal for review by the GCC. The goal is to develop guidelines that will allow departments to prepare proposals that meet the Registrar’s standards so they will move quickly through the governance process. These suggestions are based upon reviewing hundreds of course proposals and thousands of pages of course material. For assistance with degree proposals, which are prepared in accordance with SCHEV requirements, please consult the Office of Degree Management.

The process for reviewing new course, certificate, or degree proposals begins with the college curriculum committee. After the college curriculum committee approves the proposal, it is submitted to HokieCAPS via Jira and is available for review by the university community for 15 business days “15-day-review” site on Scholar. The next step is review by GCC, followed by submission of any requested revisions. Course and certificate proposals are approved by the Commission on Graduate Studies and Policies via approval of GCC minutes. Proposals for changes in existing degree programs (e.g., addition of a dual degree option) are reviewed by the Commission on Graduate Programs (CGSP) and proposals for new degrees require approval by CGSP, University Council, and the Board of Visitors.
Proposals must be uploaded to Hokie CAPS as .pdf documents with pages in this order: cover sheet, proposal, resource letter(s). Each college has a recorder with authorization to upload proposals; consult your dean’s office.

See http://www.registrar.vt.edu/faculty/index.html (Course Approval & Checksheet Information tab and Forms tab).

**Review Process Summary**

The GCC proposal approval process has multiple required components. Failure to include one or more of these components will delay approval. The required components are:

- Preparation of a complete proposal. Proposals must include:
  - Completed, signed, and dated “COVER SHEET — NEW and REVISED COURSES”
    (http://www.registrar.vt.edu/documents/course_coversheet_doc.doc)
  - The actual course or certificate proposal;
  - Statement from the Dean or Department Head, on official letterhead, as to whether teaching this course or creating this certificate will require the need for additional departmental resources. The statement should address faculty, library, space, and technical support resource issues, as relevant. This is usually brief — one to two sentences long — and it is always required; and
  - Supporting e-mail messages or letters from departments that either control courses you have identified in your proposal as prerequisites or certificate courses, or are partners for cross listing;
- Approval by the relevant department and college curriculum committees.
- Successful review by the other colleges during the 15-Business-Day Review and resolution of any questions or issues raised during that process.
- Successful review by the GCC.
- Approval by the Commission for Graduate Studies and Policies (CGS&P) via approval of the GCC’s meeting minutes which recorded approval of your proposal by the GCC.

**15-Business-Day Review**

15-Business-Day Review is a mandatory part of the GCC process. All proposals, once they are approved by a college’s curriculum committee, need to be reviewed by all VT colleges.

A complete copy of the proposal (including supporting letters as appropriate) should be posted to Hokie CAPS and Scholar. It is the responsibility of each college contact person to route proposals to the college’s faculty and department heads. New course, certificate, and degree proposals are curricular issues which are the responsibility of the faculty. The absence of a response by the 15-Business-Day review deadline is an affirmative response. If the 15-Business-Day Review window passes with no objections having been raised, the proposal proceeds to the GCC for its formal review. Objections must be posted to HokieCAPS. The academic units involved must resolve all disputes before a proposal can be considered by the GCC. Colleges should not send any material directly to the GCC. The GCC receives its agenda items only through HokieCAPS.

Revised January 2015
Reference Guide for Course Proposals

Cover Sheet — New and Revised Courses

This form is found at the Registrar’s official web site 

Some common problems that can cause a course proposal to be returned to the proposer are:

- The ADP title is too long. The ADP title is restricted to 30 characters including spaces between words and any punctuation. If space permits, the course title and ADP title should be identical;
- Effective Semester is not sufficiently far into the future to allow for a review that can take months beginning with the department level through CGSP. Therefore, the Effective Semester should be next semester or beyond, not this semester.
- All necessary signatures have not been obtained and dated. This is a requirement.
- A proposed course number has not been out of use for at least five years. Check with the Associate Registrar for Classroom Support and Enrollment Planning (1-6888) if you need to confirm that the number you wish to use is available.

It is recommended that cross-listed courses have the same number in each department; however, courses may be cross-listed with two different numbers provided they share the first digit and the last digit. For specific course numbering questions, contact the Registrar’s Office.

Course Proposal Format

The GCC will not review proposals that do not include all of the elements listed below. The completed submission should be posted to HokieCAPS as a pdf file with pages in the following order: cover sheet, proposal, resource letter(s). Make sure the pdf is right-side-up, not sideways. Send the original signed and dated copy of the cover sheet via campus mail to University Registrar’s Office, Mail Code 0134.

Any item below in bold must be included without exception. All sections must be numbered and labeled exactly as indicated.

See special instructions for conjoint course proposals at the end of this document. Examples of actual approved proposals are appended to the end of this document.

Heading (required)

Course Title (centered, upper and lower case)
Department designator (all capital letters) and suggested course number (centered)

Notes for course numbers:

- The number of a discontinued course cannot be reused for at least 5 years.
- Do not use course numbers with preassigned meaning (see http://www.registrar.vt.edu/governance/course-approval/process/index.html#CourseNumberingSystem).
- See additional course number notes below.

Revised January 2015
I — Catalog Description (required)

Brief description of the course as it will appear in the catalog up to a maximum of 10 lines. Complete sentences are discouraged. Phrases are preferred as they save catalog space. The Catalog Description must be compatible with the Learning Objectives and Syllabus. If this is a repeatable topics course, indicate the maximum number of credits. State the prerequisite(s) and the number of contact (H) and credit (C) hours. Indicate if P/F only.

Prerequisites are required in all graduate course proposals. The default prerequisite is “Graduate standing.” “Graduate standing” may be omitted only if a 5XXX or 6XXX level class is a prerequisite. Courses numbered lower than 5000 are not permitted as prerequisites, nor are statements about required majors or background.

Examples:
Pre: Graduate standing (3H, 3C)
Pre: 5534 (3H, 3C) (for a course with the same designator as the proposed course)
Pre: ISE 5014 (2H, 2C) (include designator when the pre-requisite is from a different program)

The departmental designator (ELPS, MGT, ME, etc.) of a prerequisite course should not appear if it is taught by the department proposing the course. DO NOT list undergraduate courses as prerequisites. DO NOT list prerequisites for prerequisites. If you have identified a prerequisite course that is outside of the submitting department, you will need a letter of support from that department indicating they have sufficient instructional capacity to accommodate your proposed students. You should not just assume you can put your department’s students in another department's class, as these classes may be fully populated already. Failure to include this letter will cause your proposal to be returned to you.

Course Number: 5XXX or 6XXX (required)

Provide the course number without department designation. Specify cross-listing (if any) in parentheses. Stand-alone courses must end with the digit “4.” Course numbers of a multi-semester course are separated by hyphens if they must be taken in sequence and separated by commas if not required to be taken in sequence, and must end with the digits 5 and 6.

ADP Title: Intro Course Proposal Process (required)

Automatic Data Processing Title (transcript title) is an abbreviation in upper and lower case letters of the course title and MUST NOT EXCEED 30 SPACES. Use as many of the 30 spaces as is practical, and select abbreviations that convey the maximum amount of unambiguous information. If the entire title is 30 spaces or fewer, do not abbreviate it. This title should be comprehensible to non-specialists. It is used on academic transcripts.

II — Learning Objectives (required)

What new capabilities, skills, and levels of awareness will students derive from this course? The objectives must be measurable. There will normally be at least three learning objectives, and there must be enough to cover the breadth of topics listed in the syllabus. The preamble for these entries should read:

“Having successfully completed this course, the student will be able to:” Do not use any other language.

Examples of learning objectives might read as:
• Construct a model of ……
• Demonstrate the ability to ……
• Distinguish between various theories of ……
• Verify and analyze mathematical models of ……
• Apply theories to new hardware designs……

Please use bullets (rather than numbers) for the listing of learning objectives, as shown above. Make
sure the punctuation at the end of the bullet statements is consistent for all.

Make sure the learning objectives reflect the content of the catalogue description and syllabus sections.

Do not list assignments, but state what learning students are expected to gain from that assignment.
For example:
Instead of
• “Conduct a review of the literature.”
• “Review journal articles.”
Consider
• “Analyze the use of theory in scholarly journal articles.”
• “Evaluate the research designs and analytic methods used in recent publications.”
• “Assess the scientific merits and weaknesses of research published in scholarly journals.”
• Evaluate the contribution of published scholarly journal articles to advancing the science of…”

Instead of
• “Apply analytical methods and communicate results in both written and oral presentation
  formats.”
• “Write a grant proposal.”
Consider
• “Apply analytical methods of _____ to _____ in order to justify conclusions about _____. ”
• “Synthesize the literature on ____ and develop the rationale for new research.”

The following table provides a list of acceptable action verbs to use in formulating learning objectives at
the graduate level. Avoid undergraduate-level outcomes such as define, describe, explain, identify, etc.
as indicated with * in the following chart.
Please use measurable action verbs for learning objectives. For example:

* Avoid in graduate-level proposals. Use verbs that reflect higher-order learning processes and outcomes.

The following are verbs to avoid because these verbs are difficult to quantify and evaluate. For example, how does one assess a student’s understanding or appreciation?

* Avoid in graduate-level proposals. Use verbs that reflect higher-order learning processes and outcomes.
III— Justification (required)

Explicitly address each of the following in separate paragraphs. Do not insert any headings for the paragraphs.

First paragraph: Justify why the course is needed:

Specify the reason why the proposed course should be taught. Arguments establishing the educational significance of the proposed course with respect to a curriculum or program of study are more persuasive than arguments which address staff competence, pressure, and critiques from external entities or student dissatisfaction with existing course(s).

Second paragraph: Justify the level of the course:

Poor justification for the graduate level is one of the main reasons a course gets returned to the proposer. The questions that you must answer are:

Why does the content of this course warrant a 5XXX- or 6XXX-level classification? What in this course content makes this class more advanced than a 3XXX- or 4XXX-level undergraduate class? Include a brief explanation of the rationale used by the department to arrive at the course level. The intrinsic value of the subject matter to the department, student, accrediting body, or industry is not the question here (that would be relevant to Part A), but rather, the academic rigor of the course within a particular curriculum structure or program of study.

The use of words or phrases such as “requires advanced knowledge” or “synthesizes existing literature” or “requires a thorough understanding of _______ theory” or “students work independently” are good phrases to use to justify the receipt of graduate credit for your class.

Example 1: Graduate credit is required for this course. Students will apply extensive and in-depth knowledge that builds on undergraduate learning through a conceptual understanding of the specialization. Students working independently will demonstrate the ability to adapt and innovate to solve problems and master the capacity to analyze critically and question knowledge claims in __________. Students will have the ability to apply advanced theories, models, and tools to ______________ in order to solve concrete issues relevant to ____________.

Example 2: Graduate credit is required for this course. Students will apply advanced, extensive, and in-depth knowledge that builds on undergraduate learning with analysis of __________ for graduate research. Students will develop the ability to analyze and investigate __________ independently using _________ and to deepen their scholarly development in empirical research in ___________ and ___________.

Example 3: Graduate credit is required for this course. Students need an appropriate background at the graduate level in __________ and an undergraduate degree in __________ for knowledge of the principles for ___________. Graduate students will be required to use __________ as it relates to ____________. Students, working independently, also will be required to evaluate and critique graduate level, advanced research articles in the field of ____________.

6XXX-level credit justification sample: Graduate credit is required for this course. The 6000-level is justified by the 5XXX level prerequisites. Further, this class requires advanced
knowledge of________ which was presented in 5XXX, builds on the thorough understanding of advanced _________ and multiple theories, and synthesizes the existing literature.

If the proposal is to modify an existing course, it should contain justification not just for the change, but for the course itself, in either the original or modified forms, whichever seems appropriate. (This format will ensure that the latest copy is self-contained, eliminating the need to file and consult earlier versions.) If a series of minor changes amount to a total of 20% or more, approval should be sought and the situation explained in the proposal. Often the change in content is so great that it becomes unclear if the department is offering a new course or proposing modifications to an existing course. If there is as much as 50% overlap with the existing course so that it would be inappropriate for students to take both courses, then a revision, retaining the same course number, is preferable. If it is desired that students who have taken the existing course be able to take the proposed course, call it a NEW course and assign a new number (whether or not the existing course is dropped).

IV — Prerequisites and Corequisites (required)

Indicate the prerequisites and corequisites defined in the catalog description. All proposals must note “Graduate standing” under this section unless a 5XXX- or 6XXX-level class is a prerequisite. If a specific course or courses constitute the prerequisite, list that course number (include the department designator only if the course is from a different department).

Examples (do not list any other text):
Graduate standing (minimum prerequisite)
5034, 5124 (two courses in same dept. as new course)
ABCD 5204 (course from another dept.)

A prerequisite does not, in itself, justify course level in section III.

If the prerequisites include a course from another department, a letter of support from that department must be included.

V — Texts and Special Teaching Aids (required)

In this section, proposers should list texts and teaching aids (required or recommended) that are examples of what an instructor might actually use in the course. Insert the headings “A. Required Texts” and “B. Recommended Texts” (if any texts are recommended). Do not list required software.

A. Required Texts and Teaching Aids:

If a textbook, readings, or other materials are required, one or more representative examples should be specified. If only journal articles are required, include 5 representative examples (an exhaustive list is not necessary).

If there is no required text or other required materials, state “None” and provide a justification for teaching a graduate course without any required resources.

Revised January 2015
List items in alphabetical order by author’s last name using the latest American Psychological Association (APA) style. When possible and appropriate, more recent textbooks are preferred. If more than one book or teaching aid is listed, indicate whether these are alternates or that all are required.

For books, include the total number of pages in the book (both front matter and body pages) at the end of the listing. Do not include ISBNs.

APA Style, Book Example:


APA Style, Journal Article Example:


B. Recommended Texts:

Omit this section if there are no recommended texts. APA style should be used for items listed here. Make a separate category for additional course materials and teaching aids to be used. List in alphabetical order representative special materials such as supplementary texts, periodicals, films, and courseware packets (with examples), etc. Do not attempt to be exhaustive, but limit the list to half a dozen items at most.

Do not list software or Internet sites, as these may become outdated quickly.

VI — Syllabus (required)

List topics or major units by semester with percentage of time for each topic or unit. Percentage of time must total 100% for each semester. Topics for lectures and laboratories should be listed separately when two different course numbers are to be used. Otherwise, the material may be combined in a single listing. Keep in mind that the syllabus will be reviewed by numerous people not familiar with the subject matter. It is important, thus, to avoid jargon. It is also important that care be given to the organization of the syllabus, and that it be made more detailed and complete than the catalog description, but not as complete as a final syllabus for class distribution. Do not include times used for individual assignments or testing, or percentages associated with them. Place percentages under a column heading: Percent of Course, make sure that they total 100%, and include a line at the bottom of the syllabus displaying the total (“Total: 100%”).

Typically, each syllabus topic is 10–25% of the course. If the topic is greater than 20%, a list of subtopics with their percentages should be included. The syllabus should correspond to the catalog description in Section I and the learning objectives listed in Section II.

VII — Old (current) Syllabus (in the case of a revised course)

The official syllabus (the one on file with the Registrar, not the classroom syllabus) of the
course(s) currently being taught must be included following the guidelines for Section VI. If there is no old syllabus, omit this section from the proposal.

VIII — This section is for undergraduate courses only. Omit this section from the proposal.

IX — Cross listed courses (Omit this section from the proposal if the course is not to be cross-listed.)

A course may be cross listed between two or more departments. A single course proposal is submitted for a cross-listed course. The course numbers used by each department must have identical beginning and ending digits but may have different internal digits. In other words, digits 1 and 4 must be the same, while digits 2 and 3 may be different. Cross-listed courses must have supporting letters from cross-listed departments.

Two modes of control are recognized for cross-listed courses:
1. One of the departments may be designated as the “home” department. This should be done when only that department is expected to teach the course or originate changes, but cross-listing is being offered as a convenience to the other department’s students. If the home department deletes the course from the catalog, the other department(s) must go through the course proposal process to continue the course.
2. Joint ownership of the course should be listed if it is anticipated that more than one department’s faculty will teach the course. Any changes to the course via governance will require the support of all cross-listed departments. If one department drops the course from the course catalog, the other department(s) may continue the course.

Be sure to include resource letter(s) from the cross-listed department(s).
Guidelines for Conjoint Course Proposals

Conjoint courses are pairs of 4000- and 5000-level courses that offer the same content to undergraduate and graduate students respectively. They are scheduled in the same room at the same time. The undergraduate proposal must be approved by the Commission on Undergraduate Studies and Policies before the graduate proposal can be reviewed by GCC.

Course Title

The graduate course title must match the undergraduate course title, except that it must begin with “Advanced.” For example, Biomaterials (undergraduate) and Advanced Biomaterials (graduate).

Course Number

The graduate course number ends with G. It is preferred that the undergraduate and graduate courses have the same digits except for 4 or 5 as the first digit (for example, 4024 and 5024G). However, if the parallel graduate course number is already in use, indicate a different (available) number.

I – Catalog Description

Must be identical for both courses except the graduate course will include “Pre: Graduate standing.” Both courses should meet for the same number of contact hours and carry the same number of credits.

II – Learning Objectives

Must be identical for both courses except the graduate course must include 1 or 2 additional objectives to address the advanced learning outcomes expected at that level.

III – Justification

Must be parallel for both courses. The graduate proposal must indicate the need for the course at the graduate level of instruction and must provide justification for receiving graduate credit.

IV – Preparquisites and Corequisites

Must be “Graduate standing.”

V – Texts and Special Teaching Aids

Provide sections A and B for the graduate level as indicated above.

VI – Syllabus

Must be identical for both courses.

VII, VIII, and IX – follow guidelines indicated above.
Reference Guide for Graduate Certificate Proposals

Institutional Plan for Graduate Degrees
Submit a brief statement about a proposed graduate certificate (see items under Required Content below) for pre-approval to the Vice President and Dean of the Graduate School as part of the Institutional Plan for Graduate Education process. See information on the joinable Scholar site, “Institutional Plan for Graduate Education.” Use the pre-approval form on the next two pages (delete all text in blue font). Upon receipt of pre-approval, prepare a proposal for governance review as indicated below.

Cover sheet
- Use the version for checksheets/options/concentrations/degree versions available at http://www.registrar.vt.edu/documents/checksheet_cover.doc
- The effective date refers to the year (usually spring semester) when the first recipients will complete the certificate program, not when the proposal is submitted. The effective date MUST be a future semester, NOT this semester.
- Be sure to obtain all signatures; all signatures must be dated.

Resource letters
- Obtain signed and dated resource letters from heads/chairs of all academic units involved.

Required content
Use the template found on the next page. Include details for each of the following sections:
1. Rationale and need for the graduate certificate.
2. Target population to be served.
3. Identification of admission requirements.
   Graduate certificate programs must have admission standards that are similar to related graduate degree programs.
4. Identification of course requirements.
   Graduate certificate programs must use approved graduate coursework (at least two-thirds of the courses must be graded). Requirements must include a minimum of 9 Virginia Tech graduate course hours. Transfer credits are not permitted. All prerequisites for certificate courses must be listed as required certificate courses (no hidden prerequisites should be included).
5. Identification of faculty members associated with the graduate certificate program.

Certificate Proposal notes
- No 4000-level courses can be listed.
- No transfer credits are permitted.
- If new courses are involved, proposals for new courses must be submitted in advance of, or at least simultaneously with, submission of the certificate proposal.
- For interdisciplinary certificates, indicate the responsible program and faculty member who will serve as the administrative home for the certificate on the cover sheet and proposal.

Revised January 2015
Institutional action: Graduate Certificate

Title: 37T

CIP Code: 37T
(Consult with the Office of Degree Development and Support)

Offer Code: 37T
(Consult Rosemary Blieszner, Graduate School)

Starting Term, Year: 37T  First Award Term, Year: 37T

Description: (3 paragraphs: purpose, need/justification, bulleted learning outcomes)
The purpose of this certificate is to provide students with (what will a student be able to do once they complete the certificate program? What skills will be acquired? Is the certificate pertinent to specific careers or job preparation?)

Target Audience and Time to Complete:
37T
(Please specify if any particular sub-population of individuals are targeted in this certificate program. Also specify the estimated time to completion for degree-seeking and non-degree seeking participants.)

Admission: (Edit as needed; add any specific admission requirements for this certificate, such as goals statement, interview, degree status, etc.)
Admission to the Graduate School and completing a Graduate Certificate Application are required for both degree- and non-degree seeking students.

Degree-seeking applicants:
The Graduate School requires completion of a bachelor’s degree from an accredited institution with a GPA of 3.0 or better for admission to Certificate Status. Applicants with an undergraduate GPA < 3.0 may qualify for Commonwealth Campus admission. Students pursuing a degree and a certificate simultaneously are classified within their degree program. Certificate credits may be used to meet degree requirements if they are appropriate for inclusion on the degree Plan of Study.
Non-degree seeking applicants:
A qualified person who wishes to enter Virginia Tech to obtain a graduate certificate, without being enrolled in a degree program, may apply for graduate admission to Graduate Certificate status. Such applicants submit an Application for Admission and a Graduate Certificate Application [http://graduateschool.vt.edu/forms/academics/certificate_application.pdf](http://graduateschool.vt.edu/forms/academics/certificate_application.pdf), and must meet the following criteria:

- GPA of 3.0 for admission for the last half of the credits earned for the undergraduate (bachelors) degree*
- official transcripts must be submitted.
- academic background meets the requirements of the admitting academic unit.
- International applicants must submit scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). A minimum TOEFL score of 550 paper-based (PBT) or 80 internet-based test (iBT) is required for consideration of the application. On the iBT, subscores of at least 20 on each subtest (Listening, Speaking, Reading, and Writing) are required for admission. A minimum IELTS score of 6.5 is required for admission. Some departments have higher TOEFL or IELTS score requirements than those set by the Graduate School.

Curriculum Requirements and Descriptions:

**Number of Credit Hours:** (Total credits, description of other requirements; 2/3 of courses must be graded A-F; Transfer credits are not permitted)

37T Transfer credits are not permitted.

**Required Courses:** [Course number, title, catalog description, pre/co-requisites, (class hr, cr) e.g., (3H, 3C)]

37T

**Restricted Elective Courses:** [Course number, title, catalog description, pre/co-requisites, (class hr, cr) e.g., (3H, 3C)]

37T

**Faculty Credentialing:**
The graduate certificate will be managed primarily within the Department of 37T at Virginia Tech. All involved instructional faculty have doctoral degrees in related fields.

**Affiliated Faculty:** (List name, academic rank, department for each faculty member involved in the certificate program)

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Course Delivery Format: (Edit as needed; delete any unneeded text)
All courses are classroom-based, located on the Virginia Tech campus in Blacksburg.

Some (or all) courses are delivered via distance learning. Virginia Tech has advanced infrastructure and active support for online curricular delivery though Technology-enhanced Learning and Online Strategies (TLOS; http://tlos.vt.edu/).

Some (or all) courses are delivered online. Virginia Tech has advanced infrastructure and active support for online curricular delivery though Technology-enhanced Learning and Online Strategies (TLOS; http://tlos.vt.edu/).

Resources: (Edit as needed)
Virginia Tech has the resources required to offer and sustain this certificate program. These include such resources as student support services (e.g., enrollment, help desk, library, etc.); faculty support services (e.g., copying, contracts, etc.); and general administration (e.g., budgeting and forecasting, etc.).