

Reference Guide to the Graduate Course and Certificate Proposal Development and Review Process

The VT Graduate School and the Graduate Curriculum Committee (GCC) have prepared this document to assist faculty and departments in preparing a course or certificate proposal for review by the GCC. The goal is to develop guidelines that will allow departments to prepare proposals that will move quickly through the governance process and not be subjected to numerous rewrites, or worse, a rejection. These suggestions are based upon reviewing hundreds of course proposals and thousands of pages of course material. It is important to note that the GCC only acts on proposals that come to it via the Registrar's Office after 15 Business Day Review. Please do not send course or certificate proposals directly to the GCC, as they will be returned without formal action. Proposals must be submitted to the Registrar's office (registrar@vt.edu) in either Microsoft Word, i.e., .doc or .docx, or .pdf formats.

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/forms/documents/course_coversheet.pdf) or "COVER SHEET — NEW and REVISED CHECKSHEETS, OPTIONS, CONCENTRATIONS" (http://www.registrar.vt.edu/forms/documents/checksheet_cover.pdf);
 - 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.
- Routing to and successful review by the other colleges, with a copy to the University Registrar's Office, for the 15 Business Day Review.
- Successful review by the GCC.
- Approval by the Commission for Graduate Studies and Policies (CGS&P) via approval of the GCC's meeting minutes in which your proposal was approved 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 routed through all VT colleges for their distribution and review, and copied to the University Registrar's Office.

Your 15 Business Day Review letter and a complete copy of the proposal (including supporting letters as appropriate) should be sent via e-mail to **all** college contacts, which includes both the respective Associate Dean for Academic Programs **and** the Associate Dean for Research in all eight colleges and copied to the University Registrar (wdean@vt.edu). 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 Registrar's Office will forward the proposal to the GCC for its formal review. Objections must be sent to the Dean of the college that originated the proposal, and to the Registrar's Office (wdean@vt.edu). 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** from the Registrar's Office.

Suggestions for COVER SHEET — NEW and REVISED COURSES

This form is found at the Registrar's official web site. Complete it in its entirety.

Some common problems that can cause a course 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 CGS&P;
- 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's for Classroom Support and Enrollment Planning (1-6888) if you need to confirm that the number you wish to use is available.

Also note that 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 Form

The GCC will not review proposals that do not include **all** of the elements listed below. All completed submissions should be sent to the Registrar's office via e-mail to (registrar@vt.edu) as either a Microsoft Word .doc or .docx file or a .pdf file. The Registrar will send the proposal to the GCC for review. **Two hard copies with signatures are required if signatures do not appear on the electronic copy — send 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.

Heading: Department designator and suggested course number required.

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 laboratory and credit 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.

Examples:

Pre: Graduate standing, (3H, 3C)

Pre: 5534 (3H, 3C)

Pre: ISE 5014 (2H, 2C)

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 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/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, 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 grade sheets and 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. There must be enough learning objectives to cover the breadth of topics listed in the syllabus. The preferred preamble for these entries should read "Having successfully completed this course, the student will be able to:"

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.

The following table provides a list of acceptable action verbs to use in formulating learning objectives.

Please select action verbs as follows:

abstract	compare and	distinguish	justify	record	use
acquire	contrast	dramatize	label	relate	value
adjust	compose	draw	list	repair	verify
agree	compute	duplicate	locate	repeat	weigh
analyze	conclude	employ	manage	report	write
apply	construct	estimate	measure	represent	
appraise	contrast	evaluate	memorize	reproduce	
argue	convert	examine	move	restate	
arrange	cooperate	experiment	name	review	
assemble	create	explain	observe	revise	
assess	criticize	explore	offer	schedule	
assign a	critique	express	operate	score	
value to	debate	extrapolate	order	select	
attach	defend	formulate	organize	sequence	
avoid	define	generalize	participate	set up	
bend	demonstrate	help	perform	shop	
break down	derive	identify	plan	sketch	
build	describe	illustrate	practice	solve	
calculate	design	implement	praise	specify	
carry out	detect	indicate	predict	state	
catalog	determine	inspect	prepare	summarize	
categorize	diagram	instruct	produce	support	
check	differentiate	integrate	propose	systematize	
choose	discover	interpret	question	taste	
classify	discriminate	inventory	rank	test	
collect	discuss	investigate	rate	theorize	
combine	dissect	join	recall	transform	
compare		judge	recognize	translate	

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

appreciate	become acquainted with	gain knowledge of	realize
approximate	cover	know	reflect
be aware of	comprehend	learn (about)	see
be familiar with	familiarize	provide	study
			understand

III— Justification (required)

Explicitly address each of the following in separate paragraphs.

A. 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).

B. 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: This class will apply extensive and in-depth knowledge that builds on undergraduate learning through a conceptual understanding of the specialization. Students working independently will have the ability to adapt and innovate to solve problems and master the capacity to critically analyze and question knowledge claims in _____. Students will have the ability to demonstrate knowledge of advanced theories, models, and tools relevant to _____, and possess the ability to apply appropriate specialized theories, models, and tools to solve concrete issues relevant to _____.

Example 2: This class 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 independently analyze and investigate _____ using _____ and deepen their scholarly development in empirical research in _____ and _____.

Example 3: Graduate level is required for this course. Students need an appropriate background in graduate level _____ and an undergraduate _____ degree 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: The 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 _____, 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 Co-requisites (required)

This section justifies the pre- and co-requisites 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). Justify any other prerequisite such as software proficiency, etc. In the absence of a prerequisite, indicate that the catalog statements on prerequisites associated with course level is applicable. Graduate courses generally have prerequisites, though this is not an absolute requirement. A prerequisite does not, in itself, justify course level. 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. Clearly distinguish “A. Required Texts” from “B. Recommended Texts.”

A. Required Texts and Teaching Aids:

If a textbook, readings, or other materials are required, then one or more representative examples should be specified. If there is no required text, a justification should be included. If there is more than one item, list 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 at the end of the listing.

APA Style Book Example:

Toohey, K., & Veal, A. J. (2008). *Advanced multivariate statistical analyses* (2nd ed.). New York: CABI Publishing. Pp. xiv, 365.

APA Style Journal Article Example:

Hunt, M., Ducut, A., & Lee, C. (2006). Microwave sintering of simulated moon rock. *Journal of Undergraduate Materials Research*, 2, 33–37.

B. Recommended Text:

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), websites, etc. Do **not** attempt to be exhaustive, but limit the list to half a dozen items at most.

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. Times used for testing or percentages associated with individual assignments should **not** be included. 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%, then a list of subtopics with their percentages should be included. The syllabus should match 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 syllabus of the course(s) currently being taught must be included following the guidelines for Section VI. If there is no old syllabus, delete this section from the proposal.

IX — Cross listed courses

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.

Delete this section from the proposal if the course is not to be cross-listed.