

Reference Guide

Graduate Course Proposal Development and Review Process

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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 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 Studies and Policies (CGSP) and proposals for new degrees require approval by CGSP, University Council, and the Board of Visitors.

Proposals must be uploaded to JIRA 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 or for degrees and certificates, “COVER SHEET — NEW and REVISED CHECKSHEETS, OPTIONS, CONCENTRATIONS” http://www.registrar.vt.edu/documents/checksheet_cover.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 JIRA 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 JIRA. 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 JIRA.

Reference Guide for Course Proposals

Cover Sheet — New and Revised Courses

This form is found at the Registrar's official web site (http://www.registrar.vt.edu/documents/course_coversheet_doc.doc). Complete it in its entirety (except sections VII-IX, as discussed below).

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 JIRA 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.

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.

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 not permitted; do not use verbs. Use noun phrases that reflect the course content. The Catalog Description must be compatible with the Learning Objectives (Section II) and Syllabus (Section VI). 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 delay the review process.

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. Do not append I and II to the course title.

Conjoint courses are numbered 5XXXG. See Guidelines for Conjoint Course Proposals below.

Transcript (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 Catalog Description (Section I) and Syllabus (Section VI).

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.”

Use one verb per learning objective and choose the higher-order one. For example, it is unnecessary to state “Analyze and critique...” “Critique...” is sufficient because one cannot construct a critique without analyzing the material first.

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.

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

Please use measurable action verbs for learning objectives. For example:

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

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

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)

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.

For “topics” courses, provide at least two example reading lists to illustrate the assigned learning materials for different topics.

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.

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. Indicate whether the whole book will be required reading, or selected chapters or pages from it.

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 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 list assignments, presentations, 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.

For “topics” courses, provide at least two example syllabi to illustrate the content to be covered when the courses focuses on different topics.

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 – Prerequisites 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.