



OFFICE OF THE PRESIDENT

May 17, 2013

Dean Robert C. Stacey
College of Arts and Sciences
Box 353765

Dear Bob:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised admission requirements for the Bachelor of Science degree in Economics. A copy of the change is attached.

I am writing to inform you that the Department of Economics is authorized to specify these requirements beginning autumn quarter 2013, through summer quarter 2016.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Michael K. Young".

Michael K. Young
President

Enclosure

cc: Ms. Ahna Kotila (with enclosure)
Mr. Robert Corbett (with enclosure)
Ms. Virjean Edwards (with enclosure)



UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE
ACADEMIC PROGRAMS

11/29/12

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DEC 03 2012

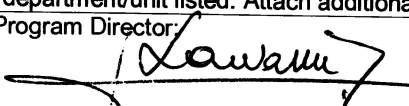
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ECON 202 1127A

After college/school/campus review, send a signed original and 1 copy to the Curriculum Office/FCAS, Box 355850.

For information about when and how to use this form: <http://depts.washington.edu/uwcr/1503instructions.pdf>

College/Campus Arts & Sciences	Department/Unit Economics	Date 11/27/12
New Programs <input type="checkbox"/> Leading to a Bachelor of ____ in ____ degree. <input type="checkbox"/> Leading to a Bachelor of ____ degree with a major in ____. <input type="checkbox"/> Leading to a ____ Option within the existing major in ____. <input type="checkbox"/> Leading to a minor in ____		
Changes to Existing Programs <input type="checkbox"/> New Admission Requirements for the Major in ____ within the Bachelor of ____. <input checked="" type="checkbox"/> Revised Admission Requirements for the Major in <u>Economics</u> within the Bachelor of <u>Science</u> . <input type="checkbox"/> Revised Program Requirements for the Major in ____ within the Bachelor of ____. <input type="checkbox"/> Revised Requirements for the Option in ____ within the major in ____. <input type="checkbox"/> Revised Requirements for the Minor in ____.		
Other Changes <input type="checkbox"/> Change name of program from ____ to ____. <input type="checkbox"/> New or Revised Continuation Policy for ____. <input type="checkbox"/> Eliminate program in ____.		
Proposed Effective Date: Quarter: <input checked="" type="checkbox"/> Autumn <input type="checkbox"/> Winter <input type="checkbox"/> Spring <input type="checkbox"/> Summer Year: 20 13__		
Contact Person: Ahna Kotila	Phone: 685-2026	Email: akotila@uw.edu
		Box: 353330
EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary).		
See attachment.		
OTHER DEPARTMENTS AFFECTED List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions.		
Department/Unit:	Chair/Program Director: 	Date: 11-28-12
Department/Unit:	Chair/Program Director:	Date:

CATALOG COPY

Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

- A minimum of 45 quarter credits completed, including ECON 200, ECON 201; STAT 311; and one of the following: MATH 112, MATH 124, MATH 134, or MATH 145
- A minimum cumulative GPA for all prior college work of 2.50; minimum 2.50 GPA for all UW coursework, when applicable.
- The minimum cumulative GPA for the four courses required for entrance (ECON 200, ECON 201; STAT 311; and one of the following: MATH 112, MATH 124, MATH 134, or MATH 145) must be at least 2.50 with a minimum 2.0 in each course.
- A one-page personal statement, typed and double-spaced, responding to the following questions: What are your personal/educational goals, and how do you expect those to be met through an economics major? What background do you bring to the program? Describe any special experiences that would contribute to your studies in the field.
- Application deadline is the second Friday of each quarter (autumn, winter, spring). Admission is competitive. Meeting above criteria does not guarantee admission to the major.

PROPOSED CATALOG COPY

Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications).
Please note: all copy will be edited to reflect uniform style in the General Catalog.

- A minimum of 45 quarter credits completed, including ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; MATH 124, MATH 125, and MATH 126 (or MATH 134, MATH 135, MATH 136).
 - A minimum cumulative GPA for all prior college work of 2.50; a minimum GPA of 2.50 for all UW coursework, when applicable.
 - The minimum cumulative GPA for four of the six courses required for entrance (ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; and calculus at the level of MATH 124 or higher, or first calculus course taken) must be at least 2.50, with a minimum grade of 2.0 for each of the six courses required for entrance.
 - A one-page personal statement, typed and double-spaced, responding to the following questions: What are your personal/educational goals, and how do you expect those to be met through an economics major? What background do you bring to the program? Describe any special experience that would contribute to your studies in the field.
 - Completion of reading comprehension, critical thinking and writing assessment essay
 - Application deadline is the second Friday of each quarter (autumn, winter, spring). Admission is competitive. Meeting the above criteria does not guarantee admission to the major.
- Sll
4/11/13

APPROVALS

Chair/Program Director:

Date:

11-28-12

College/School/Campus Curriculum Committee:

Date:

12/31/2012

Dean/Vice Chancellor:

Date:

12/3/2012

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

4/11/13

POST TRI-CAMPUS APPROVAL (when needed)

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

4/31/13

Current:

Department Admission Requirements

1. A minimum of 45 quarter credits completed, including ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; MATH 124, MATH 125, and MATH 126 (or MATH 134, MATH 135, MATH 136).
2. A minimum cumulative GPA for all prior college work of 2.50; a minimum GPA of 2.50 for all UW coursework, when applicable.
3. The minimum cumulative GPA for four of the six courses required for entrance (ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; and calculus at the level of MATH 124 or higher, or first calculus course taken) must be at least 2.50, with a minimum grade of 2.0 for each of the six courses required for entrance.
4. A one-page personal statement, typed and double-spaced, responding to the following questions: What are your personal/educational goals, and how do you expect those to be met through an economics major? What background do you bring to the program? Describe any special experience that would contribute to your studies in the field.
5. Application deadline is the second Friday of each quarter (autumn, winter, spring). Admission is competitive. Meeting the above criteria does not guarantee admission to the major.

Proposed:

Department Admission Requirements

1. A minimum of 45 quarter credits completed, including ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; MATH 124, MATH 125, and MATH 126 (or MATH 134, MATH 135, MATH 136); and 5 credits of English composition.
2. A minimum cumulative GPA for all prior college work of 2.50; a minimum GPA of 2.50 for all UW coursework, when applicable.
3. The minimum cumulative GPA for four of the seven courses required for entrance (ECON 200, ECON 201; STAT 311, STAT 341, or STAT 390; calculus at the level of MATH 124, or first calculus course taken) must be at least 2.50, with a minimum grade of 2.0 for each of the seven courses required for entrance.
4. A one-page personal statement, typed and double-spaced, responding to the following questions: What are your personal/educational goals, and how do you expect those to be met through an economics major? What background do you bring to the program? Describe any special experience that would contribute to your studies in the field.
5. Completion of reading comprehension, critical thinking and writing assessment essay. See department website for details.
6. Application deadline is the second Friday of each quarter (autumn, winter, spring). Admission is competitive. Meeting the above criteria does not guarantee admission to the major.

RE: Revised Admission Requirements for the Bachelor of Economics

Rationale for introducing a reading comprehension/analytical thinking/ writing skill test as a prerequisite for admission in the competitive major

In order to do well in economics, students must have 2 sets of skills:

1. quantitative skills – it is easy to appraise students' ability by including a calculus requirement (Math 112/124 for the BA and Math 124-5-6-for the BS since the latter is more quantitative). We have such requirements and are comfortable with them: the grade a student receives in these specific math classes is a straightforward indicator of a student's quantitative ability.

2. reading comprehension/analytical thinking /writing skills – in our discipline, students need more encompassing skills than just being able to write in the English language. We need to know whether a student can read a short article and understand its main premise. We also need to test a student's ability to think analytically and then we want to ascertain that he/she is able to communicate these ideas in writing.

We find that, some of our students have difficulty writing papers: they don't know how to analyze [economic] issues, how to organize their ideas, and how to present their ideas clearly and persuasively in writing. What is the point of solving an elaborate economic model if the student does not have an intrinsic understanding of the meaning of the model and cannot convey anything about it? These students may get decent grades in some of their economics classes as they can solve the math in the problems, but their understanding of the underlying economics concepts is limited. As a result, they do not learn much during their time in our classes, and their prospects on the job market are not good.

Their problem is not just an English language problem (this can always be sorted out as there are many writing centers that would help); it is the inability to think analytically and as a result to be creative when doing any research (and of course to write a coherent paper). At the limit, students with outstanding grades, especially in math, often join the Economics Honors Program – unfortunately some of them are unable to write an honors thesis because they do not have these skills and they eventually drop out of the program.

In the past, we included an English composition course as part of the admission prerequisites; however, we found that, over time, the grades students earned in English composition courses did not reflect a student's ability to write and even less his/her ability to think analytically. As a result, we dropped that requirement as it was skewing our selection process.

Why do we need a formal test?

When we switched from a minimum requirement to a competitive major, we were satisfied with keeping the same admission requirements as before, even lowering the minimum average GPA from 2.8 to 2.5 for the following four prerequisite courses – a basic statistics course, a quarter of calculus, in addition to the two economics introductory courses. However, the mathematical background of the applicants has since changed. Our applicants now have stronger quantitative skills allowing them to meet the GPA requirements easily, but our four prerequisites courses do not measure a student's ability in the other set of skills mentioned above: reading comprehension/analytical thinking/writing skills. Indeed students' performance in these large introductory economic classes is only remotely connected to these skills.

In addition, as part of their application to the competitive major, students have to write a personal statement explaining their interest in the Economics major. They are asked what is their personal, educational, and/or career goals and how they expect to further those goals by studying economics. This is a bland statement; it does not allow us to appraise the student's writing ability; he/she can get help from any writing center (which is fine in principle), and the answer to this very general question will not convey much insight about the student's analytical skills or creativity.

When we read the essays for the Autumn 2012 admission, we found that they were well written on the whole (no doubt with help from a writing center) but the questions did not allow us to get a feel of the student's analytical skills or creativity as students mainly wrote about themselves, as our question asked them to.

It seems that the only way we can get a candid assessment of a student's reading comprehension, analytical skills, and writing ability is through a formal proctored test. Asking students to include an essay on a specific topic in their application papers will not do for the reasons mentioned above.

Impact of introducing a reading comprehension/analytical thinking/writing skill test for admission into the Economics major

Student learning outcome

We feel that, at this point, we are discriminating against some students who have critical thinking skills; their quantitative skills are not outstanding although perfectly adequate, however they do not get admission in the department of economics when their grades in prerequisite courses are compared to those of our applicant pool. At this point, our admission standards have become lopsided in favor of students with strong quantitative skills, due to the fact that the average

mathematical ability of the students applying to the department has increased drastically in the last few years. The average grade in calculus of the students admitted is around 3.65 depending of the course taken. Since the admission prerequisite courses are math and statistics in addition to the two introductory economics courses, admission is now mainly based on quantitative skills and not at all on critical thinking. Other than on midterms and final exams, there is very little writing involved in the two introductory economics courses (Econ 200 and 201). because they are huge service courses. So, at the margin, a student with a good thinking mind but with weaker quantitative ability will be denied admission while another student will be admitted mainly because he/she has a good background in mathematics. Note also that the minimum level of the mathematics and statistics of the prerequisite courses is not very advanced; it corresponds to the level taught in strong high schools.

Another very serious concern for us is the potential impact of these lopsided admission prerequisites for our minorities. We are aware students in high schools in low socio-economic areas are exposed to inadequate mathematics teaching and we feel that our admission standards make it harder for these students to be admitted in our program.

We believe that, if this new admission system results, at the margin, in denying admission to some students who can only solve quantitative problems in their tests, but are not able to write a coherent paper on any economic issue, while admitting students who are a bit less skilled with the quantitative aspects of our discipline, but are able to intelligently analyze economics issues, the average quality of our major will improve. Basically, the second group of students will get more out of our major – they will be able to ask questions in class, to be curious and interested in their studies, resulting in more active student contribution to class discussion, something which is sorely missing with our lopsided admission process.

By changing our admission requirements, we will be able to admit a more balanced group of students, allowing better interaction between the students themselves and between the students and their instructors, thus enriching our students' experience in the major.

Moreover these students will be in a stronger situation when looking for a job – they will be able to convey their analysis of main economic issues in a coherent manner. Finally their contribution to society, as economists, will be reinforced thanks to the fact that they have learned to be critical thinkers.

Enrollment

As far as admission statistics, these new standards will be *neutral*. We have a large pool of students applying to the major every quarter and we admit around 70%. We do not anticipate nor want this to change. However, as explained above, our admission standards will be different – so at the margin, this will help us make a

more enlightened selection and admit students that we might have turned down in the past when we were putting too much emphasis on quantitative skills, accepting students who will never acquire a thorough understanding of the discipline due to their inability to think critically.

Examples of difficulties faced by students:

1. e-mail from a honors student to his instructor:

“Hi,

While I was reading these thesis of my colleagues, I realized I have huge problem.

My vocabulary does not follow the papers' level.

Throughout the quarter, I will try to upgrade my vocabulary.

Do you think just keep reading the papers of others might help?

Thank you,”

2. Quiz in 2 economics classes including the following words: “lucrative” and “frugal”

About half of the students could not answer the test question as they did not know the meaning of two words that are pretty basic in the field of economics.

3. Papers by advanced undergraduate students in 400-level classes in appendix. These students have high GPA and hope to apply to graduate school in economics. See Appendix 2

Implementation of a formal test for admission

The Foster School has implemented a writing skill assessment (WSA) test as an admission prerequisite. Can we emulate their method? The kind of essays (persuasion/position) set by the Foster School are not relevant for us since the skills that our students need are different, so we have to develop and implement our own test.

Proposal for the test (RTW)

We plan to test i. **Reading comprehension** ii. **analytical Thinking** iii. **Writing skill** (RTW)

Essay suggestion for admission into the economics major:

1. Students are asked to read and analyze a 25/30-line article with some economic content (we test students reading comprehension there).
2. Then they are asked to write about two or three issues related to the article (that have general economic content): the quality of the answer should illustrate how thoughtful and creative a student is as well as the student's ability to put his/her idea down in good English. We would also stipulate a suggested length for the paper: between one and two pages; since the answers will be hand-written, we cannot ask for a specific length.

See some examples in appendix 1.

We can offer a choice of 2 essays (a member of the undergraduate committee can do the preliminary picking and run it through the rest of the committee). The essay should be related to economics and a student who has taken the introductory economics classes (Econ 200-201) should be able to deal with the level of economics in the essay. The essay could be a short article from a journal known for its good use of the English language (e.g. the Economist).

The RTW test will last 1 hour.

Evaluation procedure

The grading scheme could be similar to that of the Foster School. The scoring could range from 1 to 6: 4 would be adequate - 5 and 6 are high - score below 4 would be questionable. There will be a separate score for each of the 3 criteria tested: reading comprehension, critical thinking, and writing skill as we want to appraise the students' ability to understand (reading skills) and analyze the article; we want to know whether they can think creatively and convey their thoughts in writing.

Obviously the candidates' English skills will be directly assessed as the essay will not be coherent if the English is weak. By averaging the 3 scores, a student with a weaker score (say a 3 corresponding to "developing competence") in one of the 3 criteria can still do OK overall. However any score below 3 would be non-acceptable (automatic admission denial) since these 3 skills are interrelated.

To ascertain that students cannot accuse the department of capricious grading, we will put all necessary checks in place. (See below)

Setting up the test and correcting the papers

The test should be scheduled before the start of the quarter and at the very beginning of the quarter. There should be at least three dates available: for Autumn 2013, the test could be scheduled two weeks and one week before the beginning of the quarter as well as during the first week of the quarter. We will offer as much flexibility as possible with the scheduling of the test. However the applications are due at the end of the second Friday of each quarter (October 4, 2013 for Autumn 2013 admission) and some 200 essays will have to be corrected by the following week. We will need to book a large room in Kane and to line up a number of proctors to oversee the exam taking.

Since there is some economics involved in the essays, we will need trained economists to read the essays. Our graduate students would be the obvious choice.

The Foster School cost must be quite high and as they charge students a \$35 to \$45 fee to take the WSA test. We will try to have lower cost per student. Basically, it might take 100 hours to read and score 200 essays each quarter. In addition, we will need to designate a graduate student (a head coordinator to organize the testing and grading effort). Finally somebody from the Undergraduate Committee should be ultimately responsible for the testing. Ideally, we would like to be able to charge the students a nominal fee that would be substantially lower (maybe \$15), otherwise the department will have to bear the extra expenses to pay for the proctors, the head coordinator, and the graders. More exact calculations of the cost can be made available if requested.

Caveat: since we have not yet carried out such testing, we will need some trial and error to optimize the process, and the details of our approach might evolve.