UNIVERSITY OF WASHINGTON

OFFICE OF THE PRESIDENT

February 9, 2010

Dean Ana Mari Cauce
College of Arts and Sciences
Box 353765

Dear Ana Mari:

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

I am writing to inform you that the Department of Astronomy is authorized to specify these requirements beginning autumn quarter 2010.

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,

Mark A. Emmert
President

Enclosure

cc: Ms. Sarah Garner (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure)
Mr. Todd Mildon, J.D. (with enclosure ASTR-20091204)

301 Gerberding Hall • Box 351230 • Seattle, Washington 98195-1230 • 206-543-5010 • FAX: 206-616-1784

12-16-09 AP

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UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

After college/school/campus review, send a signed original and 8 copies 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** Astronomy | **Date** 12/4/09

New Programs

- ☐ Leading to a Bachelor of _____ in _____ degree.
- ☐ Leading to a Bachelor of _____ degree with a major in _____.
- ☐ Leading to a _____ Option within the existing major in _____.
- ☐ Leading to a minor in _____

Changes to Existing Programs

- ☐ New Admission Requirements for the Major in _____ within the Bachelor of _____.
- ☐ Revised Admission Requirements for the Major in _____ within the Bachelor of _____.
- ☒ Revised Program Requirements for the Major in Astronomy within the Bachelor of Science.
- ☐ Revised Requirements for the Option in _____ within the major in _____.
- ☐ Revised Requirements for the Minor in _____

Other Changes

- ☐ Change name of program from _____ to _____.
- ☐ New or Revised Continuation Policy for _____.
- ☐ Eliminate program in _____

Proposed Effective Date: **Quarter:** ☒ Autumn ☐ Winter ☐ Spring ☐ Summer **Year:** 20 10

Contact Person: Sarah Garner	Phone: 543-9590	Email: sterrs@uw.edu	Box: 351580

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*).

The Department of Astronomy is changing the degree requirements for several reasons:

1) Physics 227 and 228 course credits were increased making the Astronomy degree requirements over 90. Because of this change we are reducing the number of upper-division physics electives required.
2) Astronomy 300 is a prerequisite for a required course, Astronomy 480. Astronomy 300 is not listed as a major requirement and many students miss taking this course.
3) Previously only Math 308 and Math 324 were required, now we are giving students an option of different math courses to take; still equal to 6 credits.
4) Add Physics 226 to required list of classes to reflect required courses in the Physics degree.
5) Clarifying that 9 credits of 400-level astronomy credits must be graded credits.

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:
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.

1. ASTR 321, ASTR 322, ASTR 323
2. 9 credits of astronomy 400-level courses (with at least 3 credits in ASTR 480 or ASTR 499)
3. PHYS 121, PHYS 122, PHYS 123; PHYS 224, PHYS 225, PHYS 227, PHYS 228; PHYS 321, PHYS 322, PHYS 334
4. MATH 124, MATH 125, MATH 126; ~~MATH 308, MATH 324~~
5. ~~12~~ additional physics credits in courses at the 300 level or above in physics (chosen from PHYS 311, PHYS 323, PHYS 324, PHYS 325, PHYS 328, PHYS 331, PHYS 335, PHYS 421, PHYS 422, PHYS 423, PHYS 424,PHYS 431, PHYS 432, PHYS 433, PHYS 434) or engineering as approved by adviser. Data analysis (ASTR 480) and senior-year research (ASTR 499) are highly recommended, especially for students planning graduate work.)

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.

1. ASTR 300, 321, ASTR 322, ASTR 323
2. 9 graded credits of astronomy 400-level courses (with at least 3 credits in ASTR 480 or ASTR 499)
3. PHYS 121, PHYS 122, PHYS 123; PHYS 224, PHYS 225, PHYS 226, PHYS 227, PHYS 228; PHYS 321, PHYS 322, PHYS 334
4. MATH 124, MATH 125, MATH 126; and 6 credits from: MATH 307 (AMATH 351), MATH 308 (AMATH 352), MATH 309 (AMATH 353), MATH 324 or MATH 326.
5. 6 additional physics credits in courses at the 300 level or above in physics (chosen from PHYS 311, PHYS 323, PHYS 324, PHYS 325, PHYS 328, PHYS 331, PHYS 335, PHYS 421, PHYS 422, PHYS 423, PHYS 424,PHYS 431, PHYS 432, PHYS 433, PHYS 434) or engineering as approved by adviser. Data analysis (ASTR 480) and senior-year research (ASTR 499) are highly recommended, especially for students planning graduate work.

see attached

APPROVALS

Chair/Program Director:	Date: 12/4/09
College/School/Campus Curriculum Committee:	Date: 1/21/10
Dean/Vice Chancellor:	Date: 1/21/10
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date: FEB. 5, 2010
POST TRI CAMPUS APPROVAL (when needed)	
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:

Current:

Major Requirements

89 credits as follows:

1. ASTR 321, ASTR 322, ASTR 323
2. 9 credits of astronomy 400-level courses (with at least 3 credits in ASTR 480 or ASTR 499)
3. PHYS 121, PHYS 122, PHYS 123; PHYS 224, PHYS 225, PHYS 227, PHYS 228; PHYS 321, PHYS 322, PHYS 334
4. MATH 124, MATH 125, MATH 126; ~~MATH 308, MATH 324~~
5. ~~12~~ additional physics credits in courses at the 300 level or above in physics (chosen from PHYS 311, PHYS 323, PHYS 324, PHYS 325, PHYS 328, PHYS 331, PHYS 335, PHYS 421, PHYS 422, PHYS 423, PHYS 424,PHYS 431, PHYS 432, PHYS 433, PHYS 434) or engineering as approved by adviser. Data analysis (ASTR 480) and senior-year research (ASTR 499) are highly recommended, especially for students planning graduate work.)
6. No grade lower than 2.0 is acceptable in courses fulfilling the above requirements.
7. Undergraduates interested in advanced work in astronomy are advised to take a double major in astronomy and physics. Undergraduates interested in immediate employment at an observatory or other scientific institution should include computing and electronics courses as part of their program. As a capstone sequence of hands-on research and dissemination of results, the following is highly recommended: ASTR 480, followed by either ASTR 481 or ASTR 499 or an REU project, and ending with ASTR 482.

Proposed:

Major Requirements

89 credits as follows:

1. **ASTR 300**, ASTR 321, ASTR 322, ASTR 323
2. 9 **graded** credits of astronomy 400-level courses (with at least 3 credits in ASTR 480 or ASTR 499)
3. PHYS 121, PHYS 122, PHYS 123; PHYS 224, PHYS 225, **PHYS 226**, PHYS 227, PHYS 228; PHYS 321, PHYS 322, PHYS 334
4. MATH 124, MATH 125, MATH 126; **and 6 credits from MATH 307, MATH 308, MATH 309, MATH 324, MATH 326, AMATH 352, or AMATH 353.**
5. **6** additional physics credits in courses at the 300 level or above in physics (chosen from PHYS 311, PHYS 323, PHYS 324, PHYS 325, PHYS 328, PHYS 331, PHYS 335, PHYS 421, PHYS 422, PHYS 423, PHYS 424,PHYS 431, PHYS 432, PHYS 433, PHYS 434) or engineering as approved by adviser. Data analysis (ASTR 480) and senior-year research (ASTR 499) are highly recommended, especially for students planning graduate work.)
6. No grade lower than 2.0 is acceptable in courses fulfilling the above requirements.
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