MEMORANDUM

To: Professor Tereasa Brainerd, Chair, Astronomy Department

From: Professor Dan Clemens, Director of Undergraduate Studies, Astronomy Department

Re: Proposal for Astronomy Department Distinction in Astronomy Program

Date: 19 September 2012

In Spring of 2011, the Astronomy faculty met to consider the elements of a Distinction in Astronomy program, leading to award of Distinction to select graduating seniors.

We considered several options, including special coursework, research leading to peer-reviewed publications, conventional senior theses, as well as combinations of these elements. It was the decision of the Astronomy faculty to institute a program leading to Distinction in Astronomy based on Departmental administration of senior theses, following the conventional aspects of senior theses.

The senior thesis was judged by the faculty to contain the right balance of project design, in-depth directed research, independent authorship of a significant document, and clear timelines to give our best students appropriate challenge and reward. The faculty also reaffirmed our earlier decision to have a GPA requirement of at least 3.3, and discussed possibly raising this to 3.5 at some time in the future.

In yesterday’s Astronomy faculty meeting, the attached document describing the senior thesis elements leading to award of Distinction in Astronomy was adopted and recommended for advance to the CAS Academic Policy Committee for approval. I ask that you, as Chair, send that document and this cover on to the APC.
Honors

Astronomy Work for Distinction - Guidelines

Work for Distinction is an opportunity for senior undergraduates in the Department of Astronomy to conduct in-depth research in the field. It is one of the most stimulating intellectual enterprises in which an undergraduate can engage, demanding dedication and the ability to exercise independent judgment.

To graduate with Distinction-in-Astronomy, a student must: author a written thesis; give a public presentation based on the thesis, and; take an oral examination about the thesis with a committee of the Astronomy faculty. The committee will consider both the quality of the written thesis and the result of the oral examination to determine whether the student will receive Distinction-in-Astronomy. A grade of B+ or better in both semesters of AS401/402 ("Astronomy Work for Distinction") is also required to receive Distinction-in-Astronomy.

GPA Requirements and Evaluation Semesters

Minimum grade point averages of 3.30 overall and in the courses comprising one of the Astronomy Department's three majors are required for students applying for Astronomy Work for Distinction. This evaluation takes place after the Fall semester of the student's Junior year. In exceptional cases, evaluation may take place after the Spring semester of the Junior year, at the discretion of the Director of Undergraduate Studies, in consultation with the Department Chair.

Astronomy Work for Distinction Project Proposal Submission

After ascertaining that your GPAs overall and in the major meet the standard listed above, complete the attached Application for Astronomy Work for Distinction, in consultation with your Astronomy faculty project advisor. Your faculty advisor must be a full-time CAS Astronomy faculty member and that faculty member must agree to serve as your advisor.

The materials to be included in your Application are listed on the second page of the application.

1. The faculty advisor must complete the attached Faculty Reference Form, evaluating the student's potential success in the project. This Form should be returned to the student in a signed and sealed envelope.
2. The Application form is to be signed by the student and by the faculty advisor.
3. The Application plus Faculty Reference are to be submitted to the Director of Undergraduate Studies for initial approval, and then sent on to the Department Chair for final approval.
4. Each applicant will be notified of acceptance or rejection by email.
5. If approved, the AS401/402 course(s) will be added to the student's schedule by the Department Administrative Coordinator.
6. The Astronomy Department will retain the original Application and Faculty Reference Forms and will return copies of the Application to the student and to the faculty advisor.

Deadlines to submit applications for Independent Work for Distinction for project beginning:

FALL - May 15  (If you need an extension, see the Astronomy Department Director of Undergraduate Studies)
APPLICATION FOR ASTRONOMY WORK FOR DISTINCTION

Student Information (Please print all information)

First and last name: ________________________________

ID number: ________________________________

Phone number: ________________________________

Email address: ________________________________

Major(s): ________________________________

Minor(s): ________________________________

Expected graduation date (month/year): ________________________________

Grade Point Averages:

Overall: ________________________________

In Major Courses: ________________________________

Faculty Project Advisor information (Please print all information)

First and last name: ________________________________

Email address: ________________________________

Title of Proposed Project: ________________________________

Date of Initial Submission to Astronomy Director of Undergraduate Studies: ________________________________
Application Check List

Please include the following materials in your Application.

1. A description of your proposed project. Outline the significance of the proposed work, the methods of investigation that will be employed, and the ways the results of the investigation will be analyzed and interpreted.

2. A timeline of the project, with major and minor milestones included. This should be developed jointly with your faculty advisor and should be presented with details at the 2-week level.

3. Whether publication of the results are planned or not. Note that publication (or submission for publication) is NOT required to earn Distinction-in-Astronomy.

4. A bibliography or reference list of readings relevant to the proposed work.

5. A description of how this project fits into your academic and career goals.

6. An unofficial copy of your BU transcript.

Student Signature __________________________ Date __________________________

Approval Signatures:

Director of Undergraduate Studies __________________________ Date: __________________________

Astronomy Department Chair __________________________ Date: __________________________
Faculty Reference Form

To be completed by the faculty project advisor and returned to the student in a sealed, signed envelope
(alternatively, faculty may supply their reference in the form of a letter that addresses the criteria listed below.)

Student's name: ____________________________________________

How long and in what capacity have you known the student?

Please evaluate the applicant’s aptitude for research according to the criteria listed below. Please add any applicable comments.

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<th>Poor</th>
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<td>Native intellectual ability</td>
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<td>Breadth of knowledge in subject</td>
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<td>Written communication skills</td>
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<td>Level of motivation</td>
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Comments:

I have read the student’s proposal and recommend that it be accepted as an Astronomy Work for Distinction Project.

Faculty Project Advisor ___________________________ Date: ___________________