Degree Program Assessment Plan

Degree Program - AS - Atmospheric Science (MS)

CIP Code: 40.0401.00

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Program Purpose Statement: The College of Arts and Sciences offers a broad spectrum of programs and courses in the liberal arts; humanities; mathematics; and social behavioral, and natural sciences. The primary function of the college is to impart to students the knowledge skills of thinking and communicating, and values and attitudes that constitute a liberal education. The faculty of the college seeks to instill in their students a humanistic spirit, an appreciation of creativity, a commitment to excellence and truth, an ability to think critically and communicate effectively and a desire for lifelong learning.

The courses and programs in the college also provide a base of knowledge and skills form which students may enter such professional fields of study as law and medicine.

Student Learning Outcome: Original Research - Appropriateness of Methods Used

Outcome: Upon graduation, student will have conducted an original piece of significant research

Method: Each thesis committee member will rate the thesis on the appropriateness of methods used

Goal: The program meets its goals if 80% of students receive ratings of "Professional Done" or "Well Done"

1 - Professionally done: The methods used in the research are advancing the discipline
2 - Well done: The methods used in the research are widely used by professionals for similar purposes
3 - Acceptable: The methods used in the research are adequate for the study
4 - Unacceptable: The methods used in the research are inappropriate for the study

Outcome Status: Active

Assessment Methods

Thesis - Each thesis committee member will rate the thesis on the appropriateness of methods used (Active)

Student Learning Outcome: Original Research - Scientific Contribution of the Work

Outcome: Upon graduation, student will have conducted an original piece of significant research

Method: Each thesis committee member will rate the thesis on the scientific contribution of the work
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Goal: The program meets its goals if 80% of students receive ratings of "Professional Done" or "Well Done"

1 - Professionally done: The research is equal in quality to that published in leading journals
2 - Well done: The research is equal in quality to that published in second-tier journals
3 - Acceptable: The research is reasonably done, but not publishable in a journal
4 - Unacceptable: The research was poorly done

Outcome Status: Active

Assessment Methods

Thesis - Each thesis committee member will rate the thesis on the scientific contribution of the work (Active)

Student Learning Outcome: Communication Skills - Writing Quality

Outcome: Upon graduation, students can communicate effectively in written and oral form

Method: Each thesis committee member will rate the thesis for writing quality

Goal: The program meets its goals if 80% of students receive ratings of "Professional Done" or "Well Done"

1 - Professionally done: The writing of the thesis is equal to papers published in leading journals
2 - Well done: The writing of the thesis is high quality, but not quite at professional standards
3 - Acceptable: The writing of the thesis meets basic standards for grammar and punctuation, organization and readability
4 - Unacceptable: The thesis is poorly written

Outcome Status: Active

Assessment Methods

Thesis - Each thesis committee member will rate the thesis for writing quality (Active)

Student Learning Outcome: Communication Skills - Oral Communication Ability

Outcome: Upon graduation, students can communicate effectively in written and oral form

Method: Each thesis committee member will rate the thesis defense for oral communication ability

Goal: The program meets its goals if 80% of students receive ratings of "Professional Done" or "Well Done"

1 - Professionally done: The oral defense of the thesis is equal to papers presented by top scientists
2 - Well done: The oral defense of the thesis is high quality, but not quite at professional standards
3 - Acceptable: The oral defense of the thesis meets basic standards for organization and clarity
4 - Unacceptable: The oral defense of the thesis is unacceptable for organization and clarity

Outcome Status: Active

Assessment Methods
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**Thesis** - Each thesis committee member will rate the thesis defense for oral communication ability (Active)

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**Student Learning Outcome: Breadth of Knowledge within Discipline**

Outcome: Upon graduation, students have demonstrated a thorough fundamental knowledge of topics in Atmospheric Science.

Method: Instructors of two specific courses in the required curriculum will rate the comprehensive performance of students.

Goal: The program meets its goals if 80% of students receive ratings of "Holistic Understanding" or "Thorough Understanding".

1 - Holistic understanding: The student has demonstrated exceptional understanding of the course material, including critical linkages with the current state of research in the discipline, and has further successfully integrated concepts from other coursework to broaden understanding.

2 - Thorough understanding: The student has demonstrated a solid understanding of all the course material, but has not extrapolated that understanding beyond the confines of the course.

3 - Adequate understanding: The student has demonstrated adequate understanding of most of the course curriculum, but has demonstrated struggles with portions of the material.

4 - Unacceptable: The student has not demonstrated an adequate understanding of the course material.

**Outcome Status:** Active

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**Assessment Methods**

**Course Level Assessment** - Instructors of two specific courses in the required curriculum will rate the comprehensive performance of students. (Active)