SDSU
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Curriculum, Assessment and Accreditation
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Astronomy (MS) – Sciences

Director/Chair: Dr. Eric Sandquist

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Step 1: Student Learning Outcome

DLO 7: Enumerate the steps of the theory that galaxies form from overdensities in the early universe, explain the physics justifying each step, and evaluate the theory by examining evidence collected from local and high-redshift galaxies and the intergalactic medium.

Step 2: Assessment Methods and Measures

ASTR-650: Evaluation of Exam questions related to the collapse of dark matter halos, the timescales of galaxy formation, the galaxy stellar mass function, feedback processes, and descriptions of the ways in which our understanding of galaxy formation is still incomplete.

Rubric Score 1: Student achieved between 0% and 60% on the evaluated questions.

Rubric Score 2: Student achieved between 60% and 80% on the evaluated questions.

Rubric Score 3: Student achieved between 80% and 100% on the evaluated questions.

Step 3: Criteria for Success

At least 75% of students achieve scores of 2 or 3 on the scored rubric.

Step 4: Summary of Results

ASTR-650: 87% of students met the criterion, when evaluated on Exam questions related to the collapse of dark matter halos, the timescales of galaxy

formation, the galaxy stellar mass function, feedback processes, and descriptions of the ways in which our understanding of galaxy formation is still incomplete. Roughly half of the students achieved the top rubric score.

Step 5: Action Plan

Criteria are being met.