

Dual Credit Astronomy at Madison High School

Written by Roger Boston

Houston Community College has just completed a first ever joint program with HISD to offer college-level "Stellar Astronomy" to high school students at Madison High school, on the city's south side. Nearly three dozen students were involved in this pilot program, earning both high school and college credits for their efforts.

The numbers justified two sections of the stellar astronomy, meeting on alternate days following the curious "A" and "B" day scheduling that is so pervasive in the high schools, but with very careful scheduling the syllabus was worked out and fulfilled within the calendar dates of the Spring semester, 2008. Dr. Juan Carlos Reina, Astronomy Professor from HCC NW College served as the primary architect of this program offering and "Teacher of Record", and Mr. Roger Boston, Rockwell Chair and HCC Professor from SE College taught the second session, using identical materials and record keeping methods.

Despite the fact that this was a "pilot program", and the high school's first experience with dual credit procedures, all parties involved have declared the pilot a great success. Students received lecture instruction, worked with colorful power point media presentations, explored the subject matter in depth using the "GOOGLE SKY" software and did extended research working through the links and content at the HCC Astronomy web site "<http://astronomy.hccs.edu>" plus mined great wealth from many other web sites so popular for those interested in astronomy.

They carried a heavy homework load in addition to frequent in class examinations and short daily quizzes. Additionally, they were able to see many dynamic presentations from DVD and video tape, including some which were streamed live from the web via Flash Animation.

They also did outdoor activities such as star gazing, preparing reports to bring back to class, and many were able to visit such venues as the George Observatory, area astronomy club meetings, and the Houston Museum of Natural Science to make the science seem more real to them.

More classes are scheduled for the Fall. By that date, small telescopes for observing the sun by day and the skies by night will be available, field trips scheduled to the George Observatory during the October "Astronomy Days", and access to certain remotely controlled telescopes, plus the full ranges of services and resources to be available at the TORRE web site itself.