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**Admission Criteria for
Baccalaureate Level
Department**

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Activity

- What are your admission requirements?
 - Is your process competitive?
 - Do you interview candidates?
 - What are your program prerequisites?
 - Have you studied outcomes relative your admission requirements?
 - What are the results?

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Standardized Tests

- Daryl G Smith & Gwen Garrison, 2005
 - “If tests are overemphasized in the admissions context, they can contribute to a significant loss of talent”
 - SAT predicts at best 20% of variance of success
 - 80% explained by other factors

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Attributes

- Cognitive
 - Grades
 - Academic ability
- Non-cognitive
 - Social skills
 - Attitude toward success
 - Demographics

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Recent Research

- Kwan, Childs, Cherryman, Palmer, Catton
- 3 yr. program
 - BSc in Medical Radiation Sciences
- GPA 3.0 and a C in biology, math & physics and chemistry for NM
- Criteria and National Certification for 122
 - 2009 - no positive correlations for non-cognitive variables
 - Communication, compatibility, initiative, self-evaluation

Journal of Allied Health, Fall 2009, 38(3)

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Track Specific

- Positive correlations for preadmission GPA, biology, math and physics grades for some tracks
 - Radiography - math grades correlated with success
 - Therapy - no correlation with course requirements & successful certification
- There were correlations between program courses

Journal of Allied Health, Fall 2009, 38(3)

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Espen, Wright, Killion

- 2006 - surveyed programs in Texas & Oklahoma
 - No universal admission process
 - Most common criteria consisted of:
 - GPA, Science & related courses, interviews, standardized tests

Radiologic Technology, May 2006, 77(5)

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Kudlas

- 2006 - retention rates in radiography
 - 327 surveys analyzed
 - 6,443 students
 - 1,252 left programs
 - Higher retention rates for programs using competitive admission
 - Selective GPA (science & math only) & reference letters were statistically significant in predicting retention

Journal of Allied Health, Fall 2006, 35(3)

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AASU Admission Criteria

- Overall entry GPA 2.5 or greater
- Program prerequisites:
 - 50 semester hours of degree requirements
 - College Algebra
 - Two college English courses
 - 4 of the 5 required lab sciences

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Collected Data

- 268 Students
- Entry and Exit GPA
- Selective GPA
 - Math, English, Sciences
 - Specific rad sci courses
 - Imaging, Physics, pathology, procedures, principles of radiation therapy

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Variables

- Retention
- On time graduation
- Post Baccalaureate Degree
- # of sciences completed prior to admission
- Year some courses were taken
- General Physics prior to admission
- # of sciences repeated

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Descriptive Statistics

- 10 Classes from 1998 - 2007
 - 230 graduated - 85.8%
 - 24 academic withdrawal
 - 12 personal withdrawal
 - 2 in progress graduated late
- Attrition 10 yr. average 13.4%
 - 2001 - 8.7% ---- 2003 - 11.1%
 - 2004 - 11.8% -- 2005 - 14.3%
 - 2006 - 13.9% -- 2007 - 27.8 %

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Trends

- Academic withdrawals tended to have lower entry GPAs
- Personal withdrawals tended to have higher entry GPAs
- Withdrawals tended to have lower A&P II grades

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Multiple Linear Regression

- Calculated predicting graduation status based on:
 - Entry overall GPA
 - A & P II grade
 - # of sciences completed prior to admission
 - General Physics or Physical Environment grade
- Not significant - none of the variables can be used to predict graduation

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Earlier Research

- Schulz, Down, Fischbach
- Admission criteria & attrition rates
 - ACT scores, High School rank and specific subject grades
- 10 yr, 179 students
 - Avg. 10 yr attrition rate = 32%
- None of the admission criteria indicated a statistically significant relationship

Radiologic Technology, Jul-Aug 1995, 66(6)

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Why?

- When studying long term success, relatively few studies exist.
- At AASU, we remediate and tend to do what is needed to ensure student success.
- I suspect that this is happening at other institutions as well.

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Research Needed

- Instead of correlating with attrition or certification focus on:
 - Specific courses - Do college algebra grades positively correlate with radiation physics grades
 - National study of attrition factors for each track
