

NATIONAL AMERICAN UNIVERSITY HOLDINGS, INC.

National American University Holdings, Inc. Announces Stock Repurchase Plan of Up to \$10 Million of Common Stock

Rapid City, South Dakota, November 4, 2011 — National American University Holdings, Inc. (the “Company”) (NASDAQ: NAUH), which through its wholly owned subsidiary operates National American University (“NAU”), a regionally accredited, proprietary, multi-campus institution of higher learning, today announced approval of a stock repurchase program.

On October 31, 2011, the Company’s Board of Directors authorized a stock repurchase plan of up to \$10 million of common stock in both open market and privately negotiated transactions. The timing and actual number of shares purchased will depend on a variety of factors such as price, corporate and regulatory requirements, and other prevailing market conditions. The plan has not been assigned a predetermined date of expiration, but may be limited or terminated without prior notice.

Ronald L. Shape, Ed.D., Chief Executive Officer of the Company, commented, “Following the completion of the previously authorized \$10 million stock repurchase plan in the fiscal 2011 third quarter, we believe the decision by our Board of Directors to commit an additional \$10 million toward a new repurchase plan demonstrates our continued shared confidence in the long-term prospects of our business and industry. At August 31, 2011, we reported cash and cash equivalents and investments of \$43.7 million and no long-term debt. In light of these factors, we believe that this plan is both a prudent use of capital and an additional opportunity to create long-term value for our stockholders.”

About National American University Holdings, Inc.

National American University Holdings, Inc., through its wholly owned subsidiary, operates National American University (“NAU”), a regionally accredited, proprietary, multi-campus institution of higher learning offering associate, bachelor’s, and master’s degree programs in health care and business-related disciplines. Accredited by The Higher Learning Commission and a member of the North Central Association of Colleges and Schools, NAU has been providing technical and professional career education since 1941. NAU opened its first campus in Rapid City, South Dakota, and has since grown to multiple locations throughout the central United States. In 1998, National American University began offering online courses. Today, NAU offers degree programs in traditional, online, and hybrid formats, which provides students increased flexibility to take courses at times and places convenient to their busy lifestyles.

Forward Looking Statements

This press release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding the Company’s business. Statements made in this release, other than those concerning historical financial information, may be considered forward-looking statements, which speak only as of the date of this release and are based on current beliefs and expectations and involve a number of assumptions. These forward-looking statements include outlooks or expectations for earnings, revenues, expenses or other future financial or business performance, strategies or expectations, or the impact of legal or regulatory matters on business, results of operations or financial condition. Specifically, forward-looking statements may include statements relating to the future financial performance of the Company; the ability to continue to receive Title IV funds; the growth of the market for the Company’s services; expansion plans and opportunities; consolidation in the market for the Company’s services generally; and other statements preceded by, followed by or that include the words “estimate,” “plan,” “project,” “forecast,” “intend,” “expect,” “anticipate,” “believe,” “seek,” “target” or similar expressions. These forward-looking statements involve a number of known and unknown risks and uncertainties or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by those forward-looking statements. Other factors that could cause the Company’s results to differ materially from those contained in its forward-looking statements are included under, among others, the heading “Risk Factors” in the Company’s Annual Report on Form 10-K filed on August 5, 2011 and in its other filings with the Securities and Exchange Commission. Any forward-looking statements made by the Company speak only as

of the date on which they are made. The Company is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements, whether as a result of new information, subsequent events or otherwise.

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