

NATIONAL AMERICAN UNIVERSITY HOLDINGS, INC.

National American University Holdings, Inc. Announces Appointment of Venessa D. Green as Chief Financial Officer

Rapid City, South Dakota, November 3, 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 that its Board of Directors has ratified the appointment of Ms. Venessa D. Green to the position of Chief Financial Officer, effective as of October 31, 2011.

Ms. Green has worked in various capacities at National American University since 2004, having most recently served as Chief Financial Officer since April 2010. Ms. Green began her career at NAU serving as its business manager/controller. In 2008, Ms. Green became vice president of finance at NAU and held that position until 2009, when she was named interim chief financial officer. Since 2006, Ms. Green has also served as an adjunct faculty member for NAU.

Ms. Green is a licensed certified public accountant in the state of South Dakota and has been a member of the American Institute of Certified Public Accountants since 2007 and a member of the South Dakota Certified Public Accountant Society since 2007. Ms. Green holds a bachelor’s degree from DeVry Institute of Technology and an MBA from NAU.

Ronald L. Shape, Ed.D., Chief Executive Officer of the Company, stated, “Venessa has been a dedicated member of our finance team for a number of years, and we are delighted to have her continue her contributions as a leader on this management team as the Company’s new Chief Financial Officer. Her wealth of knowledge, in-depth financial expertise, experience as NAU’s CFO, and hard work over the years on the Company’s behalf made her the best choice for the chief financial officer position at the parent company level. We all look forward to her service and leadership going forward.”

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, NAU 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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