

Moore, Marsha M.

From: Manring, Noah D.
Sent: Friday, June 01, 2012 9:18 AM
To: Okker, Patricia
Cc: Thompson, James E.; Tzou, Robert D.
Subject: RE: template for program assessment
Attachments: ECE Program Assessment 2012 (rev. 01).docx

Dear Pat:


I have modified our program assessment per your suggestions, and am giving notes in the text below for describing what I have done. Please let me know if I need to make any other changes, and thanks for your guidance.

Sincerely, Noah

Noah D. Manring
Glen A. Barton Professor
Interim Chairman, Electrical and Computer Engineering
University of Missouri
Columbia, MO 65211
ManringN@missouri.edu
573-884-5484

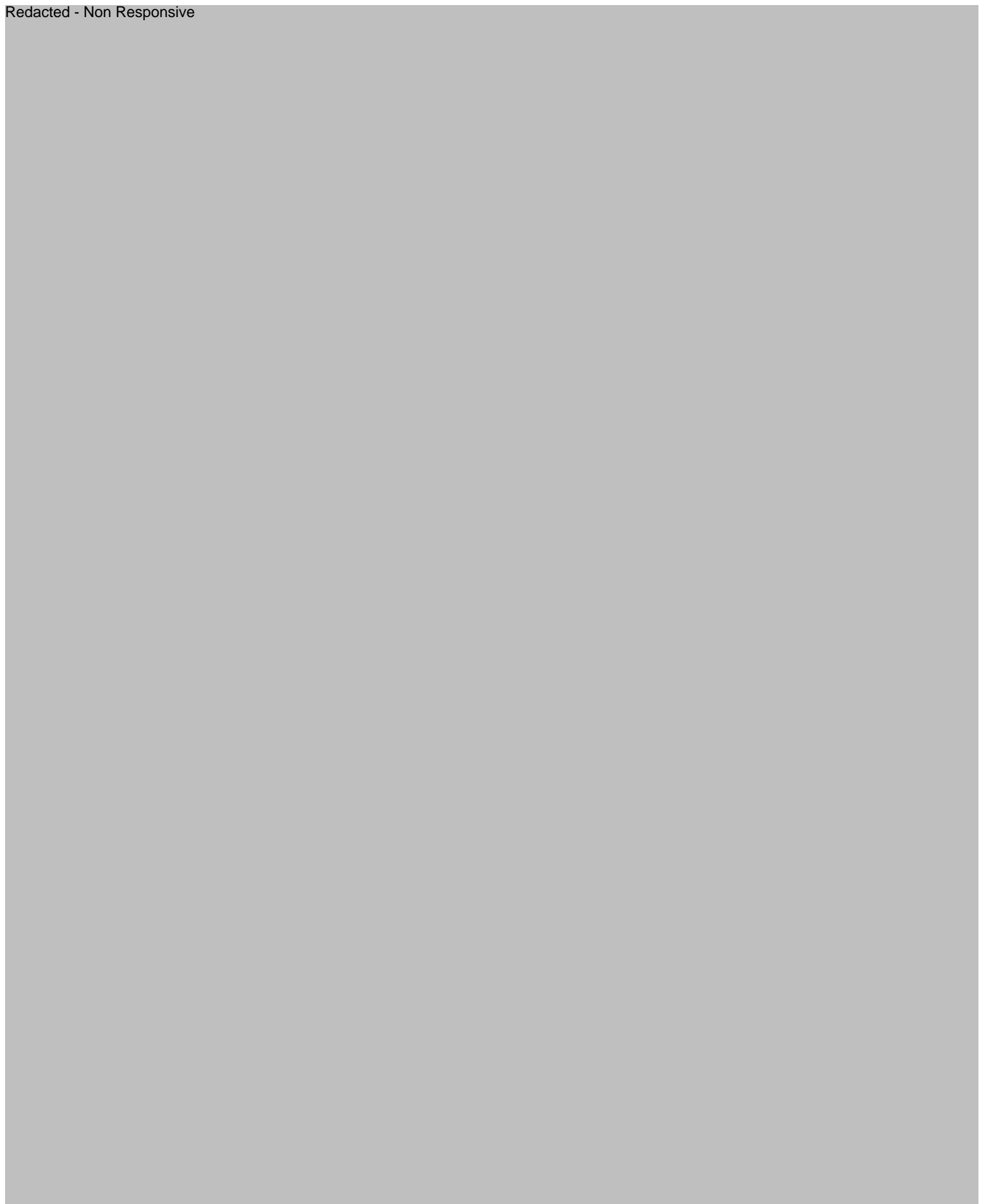
"A Proud Tradition, Engineering the Future!"

Redacted - Non Responsive





Redacted - Non Responsive



From: Okker, Patricia
Sent: Friday, February 10, 2012 2:33 PM
To: Tan, Jinglu; Deng, Baolin; Virkler, Mark R.; Xu, Dong (UMC); Manring, Noah D.; Occena, Luis G.; Tzou, Robert D.
Cc: Akers, Lex A.; Thompson, James E.
Subject: template for program assessment

To the chairs in Engineering,

In response to your requests, I have put together a template for the program assessment report (attached). Please note that it does encourage "cutting and pasting" from your accreditation reports. Also, if you have any suggestions for the template itself, please let me know.

Pat

--

Pat Okker
Professor of English
Faculty Fellow, Office of the Provost
University of Missouri
320 Tate Hall
Columbia, MO 65211

573-882-7998
573-882-5785 (fax)

A number of pages from this attachment have been redacted as they are not responsive to the request.

Electrical and Computer Engineering

University of Missouri

Program Assessment 2012

The following pages have been redacted as non-responsive:

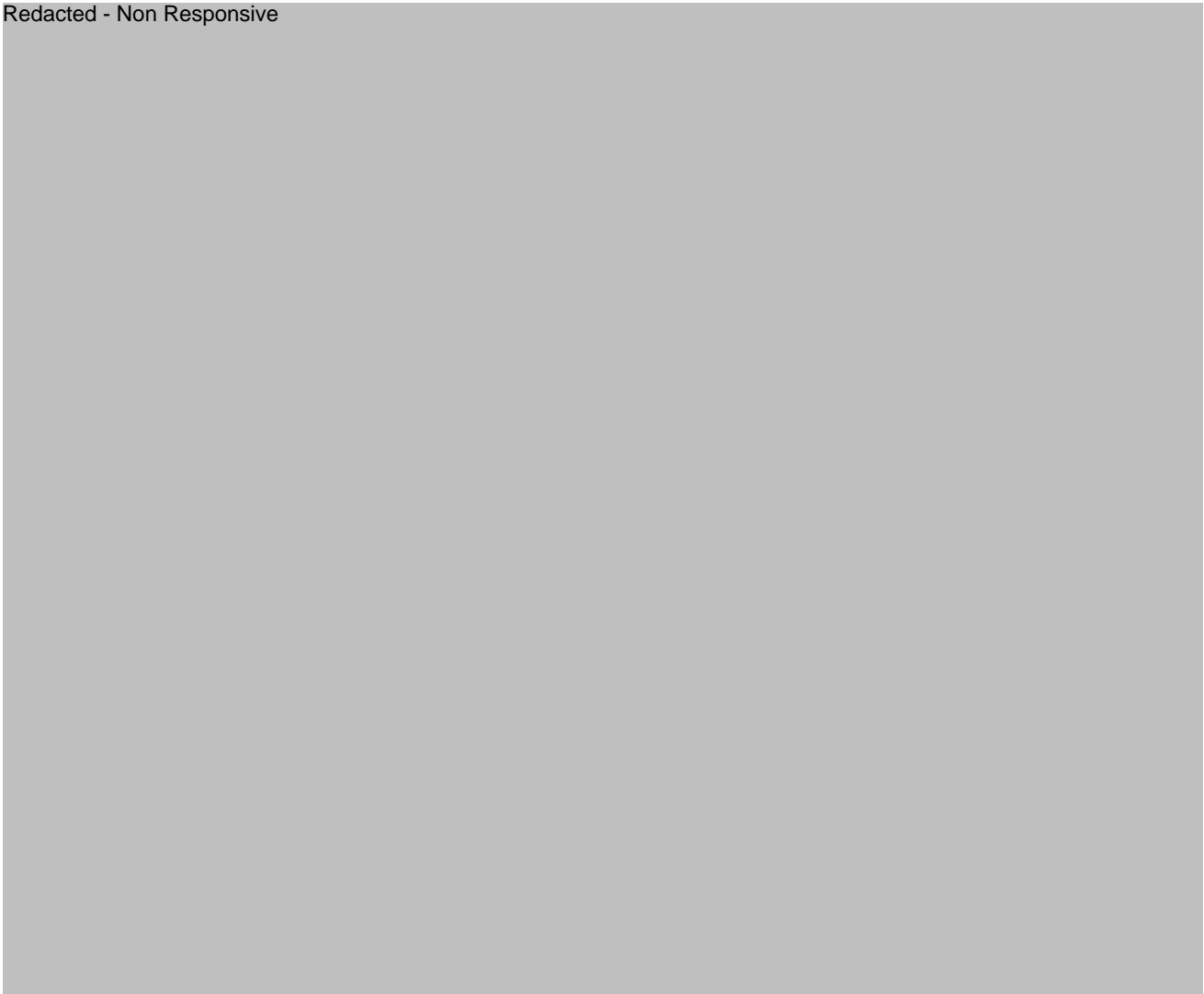
- Pages 1-12
- Pages 15 - 17

4. Assessment of Student Learning.

Description of Undergraduate Degree Programs and Tracks. The Department of Electrical and Computer Engineering offers both the Bachelor of Science with a major in Electrical Engineering and the Bachelor of Science with a major in Computer Engineering. The undergraduate program in both degrees at the University of Missouri provides students with the requisite fundamentals in either discipline and prepares them for beginning practice in both the traditional and emerging fields of these disciplines. The degree programs are flexible 126-credit structures that provide the fundamentals of engineering, in addition to a thorough coverage of the major specialties within their respective fields. In addition, technical electives allow concentration in selected areas. The ECE department emphasizes close interaction with industry. Industry engineers visit regularly and industry-sponsored student projects are provided to give extra dimension to the program. Many students in the ECE department combine the electrical engineering major with the computer engineering major in a special 138-credit program. These students receive both the BS EE and BS COE degrees. Students interested in interdisciplinary studies may use some electives to study business, premedicine, prelaw, and other areas. Students are able to choose from a wide variety of courses offered by other departments in the College of Engineering, as well as from other MU colleges, taking advantage of the multidisciplinary nature of the campus. The current list of “electives tracks” is given as follows:

1. Communications and Signal Processing
2. Intelligent Robots
3. Robot Vision
4. Computer Vision
5. Pattern Recognition
6. Control Systems
7. Power Systems
8. Mechatronics
9. Computational Neuroscience
10. Honors Research
11. Micro/Nanoelectromechanical Systems
12. Nuclear Science
13. Photonics
14. Semiconductor Manufacturing and Process Control
15. Visual Servoing
16. Electromagnetics
17. Nanotechnology

Redacted - Non Responsive



Moore, Marsha M.

From: Smith, Gloria
Sent: Saturday, June 02, 2012 10:20 AM
To: Foster, Brian L. (Provost); Duncan, Robert V. (Vice Chancellor of Research); O'Brien, Michael J. (A&S Dean); Thompson, James E.; Wyatt, Steve (Economic Development); Gahl, John M.; Solbrekken, Gary; Loyalka, Sudarshan K.; Robertson, J. David; Taub, Haskell; Wolfe, Tim M.; Schwartz, Robert W.; Butler, Ralph
Cc: Davis, Teresa L. (Provost Office); Schlink, Carla S.; Trimble, Jessica L.; Naufel, Brenna R.; Weston, Katherine Amanda; Helm, Sherri; Stout, Margee P.; May, Regina A.; Moore, Marsha M.; Reeves, Jeffory A.; Gruer, Pamela; Blank, Penny L.
Subject: Updated Itinerary for Wednesday, June 6
Attachments: Ameren-Westinghouse Schedule 6-6-12.doc

Good morning. I am attaching an updated itinerary for you for Wednesday, June 6. Please note the additional attendees from Ameren, Westinghouse, and Burns & McDonnell. Thank you.

Gloria Smith
Executive Staff Assistant
Office of Research
205 Jesse Hall
573-882-9582
smithgl@missouri.edu

**Ameren UE/Westinghouse Americas
visit to the
University of Missouri (MU)
Itinerary for Wednesday, June 6, 2012**

---Room 572 Bond Life Sciences Center---

Afternoon Schedule

12:00 to 1:15 - Welcome and Working Lunch

Brian Foster, Provost - Welcome

Rob Duncan, Vice Chancellor for Research - Schedule Overview
and MU's Technical Depth to Support Small Modular Reactors

Mike O'Brien, Dean, College of Arts and Science

James Thompson, Dean, College of Engineering

Steve Wyatt, Vice Provost for Economic Development

Ameren UE Guests:

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Warren Wood, Vice President, Regulatory and Legislative Affairs

Scott Bond, Manager of Nuclear Development

Michael Kearney, Manager, Economic Development

Westinghouse Americas Guests:

Joe Zwetolitz, President, Americas Region

Layla Sandell, Small Modular Reactor (SMR) Business Development

Tom Kindred, Senior Engineer

Ed Lahoda, Consulting Engineer

Matt Memmott, Advanced Reactors, Senior Engineer

Glenn Neises, Chief Nuclear Officer, Burns & McDonnell

Katie Marx, Consultant

1:15 to 1:30 – Break

1:30 to 2:50 – MU's Collaborative Capabilities

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5:00 to 5:45 – Tour of the MU Research Reactor (MURR) and Associated Programs and Capabilities

Ralph Butler, Director

5:45 to 6:00 – Closing/Summary Session – North Office Addition Classroom

Rob Duncan

Davis, Teresa L. (Provost Office)

From: Smith, Gloria
Sent: Saturday, June 02, 2012 4:32 PM
To: Smith, Gloria; Foster, Brian L. (Provost); Duncan, Robert V. (Vice Chancellor of Research); OBrien, Michael J. (A&S Dean); Thompson, James E.; Wyatt, Steve (Economic Development); Gahl, John M.; Solbrekken, Gary; Loyalka, Sudarshan K.; Robertson, J. David; Taub, Haskell; Wolfe, Tim M.; Schwartz, Robert W.; Butler, Ralph
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Importance: High

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Rob Duncan

Moore, Marsha M.

From: Butler, Ralph
Sent: Monday, June 04, 2012 3:28 PM
To: Sanford, Matthew R.; Flagg, Michael Afton; Cutler, Cathy
Subject: SNM Talking Points

Attached is a draft with my suggestions.

Ralph



SNM 2012 Talking
Points (DRAFT...

SNM 2012 Talking Points

(June 4May 23, 2012 DRAFT)

REDACTED

REDACTED - Non Responsive

Q: I heard the reactor is shutting down. What's the story?

A: You probably heard news about the University of Missouri's nuclear science and engineering institute (NSEI). The NSEI institute is an academic unit on campus. MURR is not affiliated with the NSEI or any other academic unit at the University of Missouri as MURR is a stand-alone research enterprise, and MURR is a separate research center. While NSEI and MURR do collaborate on numerous projects, MURR is not involved in nor affected by the restructuring that is being discussed.

Moore, Marsha M.

From: Sanford, Matthew R.
Sent: Tuesday, June 05, 2012 9:42 AM
To: Mottaz, Kelly Lynn; Flagg, Michael Afton; Cutler, Cathy; Ketring, Alan R.; Hennkens, Heather M.
Cc: Butler, Ralph
Subject: SNM 2012 talking points
Attachments: SNM 2012 Talking Points.docx

Everyone,

See attached questions we expect to receive at SNM.
Answers approved by Ralph.

Thanks,
Matt

SNM 2012 Talking Points

REDACTED

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From: Butler, Ralph
Sent: Tuesday, June 05, 2012 10:54 AM
To: 'Charlotte Butler'
Subject: FW: ***Correction*** RE: Updated Itinerary for Wednesday, June 6
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Rob Duncan

Moore, Marsha M.

From: Prelas, Mark A.
Sent: Tuesday, June 05, 2012 1:02 PM
To: Justice, George
Subject: RE: Albert Gu

George,

Thank you for the update. Albert was at one time a Jr professor at Tsinghua. He could not get a PhD because of the cultural revolution. He spent 10 years working on a farm before they allowed him to go back to Tsinghua around 1979. In 1981 he was the first Chinese student allowed to come to the US for a PhD. He joined nuclear engineering and worked with me on nuclear driven lasers. He went on to a distinguished career in the US nuclear industry. It is fitting he is going back to teach where he started. Tsinghua is the Chinese equivalent of MIT. Sudarshan is working with the professor at Tsinghua who is in charge of building a series of advanced reactors like the high temperature cooled gas reactor. My guess is that Albert will work with him as well. We would like to strengthen our ties at Tsinghua and have a great opportunity. I appreciate your strengthening the tie through Albert. I would like to visit Tsinghua in the future.

Mark

Mark A. Prelas, PhD and PE
Professor and Director of Research
Nuclear Science and Engineering Institute University of Missouri Columbia, MO 65211 USA
Phone: +(573) 882-9691
Fax: +(573) 884-4801
E-Mail: prelasm@missouri.edu
Web Page: <http://prelas.nuclear.missouri.edu>

-----Original Message-----

From: Justice, George
Sent: Monday, June 04, 2012 11:12 PM
To: Prelas, Mark A.
Subject: Albert Gu

Hi, Mark.

Andrew Grabau and I just had a very pleasant dinner with Albert Gu. Thanks for suggesting we get in touch with him. He was delightful to talk to, and he made a nice gift of \$500 for Nuclear Engineering, which we'll process and make sure becomes available to NSEI. Redacted - Non Responsive

Redacted - Non Responsive

I think one of the things he might be able to help us with (and he volunteered to do so) would be to make connections at Tsinghua University--he's now retired from Siemens and Tsinghua has invited him to come back and do some teaching and advising. Albert was excited about helping us build connections there--might provide a good opportunity for you to visit China, if you could, and I know Tsinghua is one of the top universities there (maybe THE top).

I can report more when I get back--he might be a good person to feature somehow in university publicity. He's very proud of his recent article (which he said you had) and a recent, somewhat different, magazine article in the European magazine for Nuclear Engineering (which he said you hadn't seen).

Hope all is well with you.

Best,
George

Moore, Marsha M.

From: Foster, Brian L. (Provost)
Sent: Wednesday, June 06, 2012 10:47 PM
To: Justice, George; Dean, Kenneth D.; Banken, Mary Jo (News Bureau)
Subject: RE: "Graham's fairy tales " - Campus Chatter - ColumbiaTribune.com

Follow Up Flag: Follow up
Flag Status: Completed

Interesting. I guess this does confirm that Janese has really been captured by the NSEI people. Don't know what to make of that.

Brian

-----Original Message-----

From: Justice, George
Sent: Wednesday, June 06, 2012 9:42 PM
To: Foster, Brian L. (Provost); Dean, Kenneth D.; Banken, Mary Jo (News Bureau)
Subject: "Graham's fairy tales " - Campus Chatter - ColumbiaTribune.com

This is a pretty frustrating blog entry (although perhaps no one pays any attention to Janese's blog except for NSEI faculty). Her utter lack of understanding would be okay if she admitted that she didn't understand. But she's bought Sudarshan's perspective hook, line, and sinker.

Why doesn't she sit down with Ken for a more rational perspective on how all this works?

George

<http://www.columbiatribune.com/weblogs/campus-chatter/2012/jun/06/grahams-fairy-tales/>

Moore, Marsha M.

From: Tzou, Robert D.
Sent: Thursday, June 07, 2012 3:58 PM
To: Kovaleski, Scott; Gahl, John M.
Cc: Thompson, James E.
Subject: NEP Further Discussion
Attachments: NEP Core Nuclear Engineering Core

Scott and John,

Jim and I just came out from a meeting with George, Brian and Ken, regarding the process of creating our curriculum and courses for the Nuclear Engineering Program in the College of Engineering. We are advised (mandated) to have emphasis areas defined in our program, for the purpose of distinguishing our degrees with the existing ones offered by NSEI. We are in fact using the existing degrees at MU, but different emphasis areas designated on our degrees will differentiate ours from theirs. MS/PhD in Nuclear Engineering alone, as we originally planned, will not work because it bears the same name as the degrees currently used by NSEI. MS/PhD in Nuclear Engineering with emphasis in Materials, for example, will work because NSEI's emphasis areas do not include Materials. MS/PhD in Nuclear Engineering with emphasis in Energy serves as another example, but Energy may be close to Power as NSEI has been used.

Second, we are advised (mandated) to create OUR OWN courses, particularly the five core courses as we have defined, without using the same course numbers as NSEI currently has. For courses that have same contents as those in the NSEI curriculum, we could emphasize different material coverage for ABET accreditation to distinguish our courses from theirs. Brian called it "re-conceptualization" of our courses, which will bear a different course number and a different title from theirs.

In this context I am attaching the original proposal prepared by Scott for the five core courses. Would you please look through them and come up with different titles for them? We will need to not only present the course syllabi (again with different contents/approaches for acquiring ABET accreditation) but also justify the qualification of the faculty members who will be teaching these courses. Our proposal, particularly the five core courses, will be due to the Dean before June 15.

Jim is writing another email to invite the input from the NSEI faculty. We are targeted toward the beginning of September to bring engineering, NSEI, MURR, and A&S faculty together to finalize our planned curriculum. We will then present our curriculum and planned courses (core and electives) to the Graduate Faculty Senate in Fall 2012 to ensure the final approval to be acquired before end of Spring 2013.

Bob

Moore, Marsha M.

From: Kovaleski, Scott
Sent: Wednesday, May 23, 2012 10:57 AM
To: Tzou, Robert D.; Gahl, John M.
Subject: NEP Core Nuclear Engineering Core

Some core suggestions.

Core courses at the 4000/7000:

Intro to Nuclear Physics/Interactions of Radiation with Matter/(NE8409 Interaction of Radiation with Matter) - Example Text: Krane, Introductory Nuclear Physics - Basic concepts, elements of quantum mechanics, nuclear properties, radioactive decay (alpha, beta, and gamma), elements of radiation detection, nuclear reactions and nuclear fission, accelerator applications and special relativity.

Nuclear Reactor Engineering/Intro to Nuclear Engineering/(NE 4365 Nuclear Power Engineering) - Example Text: Glasstone and Sesonske, Nuclear Reactor Engineering - Note this could be two courses at the 4000/7000 level - Energy systems and nuclear fission, nuclear reactions and radiation, neutron diffusion and slowing down, principles of reactor analysis, kinetics and control, nuclear reactor shielding.

Radiation Detection and Measurement/(NE 4391 Nuclear Radiation Detection) - Example Text: Knoll, Radiation Detection and Measurement - Probably use the chemistry description for their cross-listed course.

Nuclear Systems/Thermal Hydraulics/(NE 4357 Nuclear Heat Transport?) - Example Text: Todreas and Kazimi, Nuclear Systems I - This description should be put together by someone in MAE. Possibly, Thermal hydraulic characteristics of power reactors, thermal design principles, reactor heat generation, single phase transport, two-phase transport, thermodynamics of nuclear energy conversion systems.

Nuclear Materials/(NE 4349 Nuclear Engineering Materials) - Pinhero, Description- Properties of materials for reactor components, radiation damage and corrosion, metallurgy of reactor materials.

Dr. Scott Kovaleski

Associate Professor
Electrical and Computer Engineering
University of Missouri
349 Engineering Building West
Columbia, MO 65211

P: 573-882-8377
F: 573-882-0397

Moore, Marsha M.

From: Tzou, Robert D.
Sent: Thursday, June 07, 2012 5:36 PM
To: Gahl, John M.; Kovaleski, Scott
Cc: Thompson, James E.
Subject: RE: NEP Further Discussion

Thanks, John. These are viable areas of emphasis. Hopefully Scott will be able to finalize the course titles when he returns.

Bob

----- Original message -----

Subject: RE: NEP Further Discussion
From: "Gahl, John M." <GahlJ@missouri.edu>
To: "Tzou, Robert D." <TzouR@missouri.edu>, "Kovaleski, Scott" <kovaleskis@missouri.edu>
CC: "Thompson, James E." <ThompsonJE@missouri.edu>

To all:

Scott is on travel but will be back next week. I will suggest (off the top of my head) as a straw man three emphasis areas. Please critique liberally.

- 1) Materials, chemistry, fuel cycle
- 2) Operations, compliance, stewardship
- 3) Applied physics, accelerators, plasma

I like the idea of starting over on the courses.
John

From: Tzou, Robert D.
Sent: Thursday, June 07, 2012 3:58 PM
To: Kovaleski, Scott; Gahl, John M.
Cc: Thompson, James E.
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Second, we are advised (mandated) to create OUR OWN courses, particularly the five core courses as we have defined, without using the same course numbers as NSEI currently has. For courses that have same contents as those in the NSEI curriculum, we could emphasize different material coverage for ABET accreditation to distinguish our courses from theirs. Brian called it “re-conceptualization” of our courses, which will bear a different course number and a different title from theirs.

In this context I am attaching the original proposal prepared by Scott for the five core courses. Would you please look through them and come up with different titles for them? We will need to not only present the course syllabi (again with different contents/approaches for acquiring ABET accreditation) but also justify the qualification of the faculty members who will be teaching these courses. Our proposal, particularly the five core courses, will be due to the Dean before June 15.

Jim is writing another email to invite the input from the NSEI faculty. We are targeted toward the beginning of September to bring engineering, NSEI, MURR, and A&S faculty together to finalize our planned curriculum. We will then present our curriculum and planned courses (core and electives) to the Graduate Faculty Senate in Fall 2012 to ensure the final approval to be acquired before end of Spring 2013.

Bob