Name and Rank: William T. Rhodes, Professor       Date: 22 April 2011

Department and College: Computer & Electrical Engineering and Computer Science
College of Engineering and Computer Science

A. Teaching

1. Please list all the courses taught during each semester and include results of the course evaluations.

<table>
<thead>
<tr>
<th>COURSES TAUGHT</th>
<th>Number of students responded</th>
<th>Percent responded</th>
<th>Overall rating of the Instructor (In new forms: Quality of Instruction (#20) and Rating of the instructor (#21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2010 courses</td>
<td>2010</td>
<td></td>
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<tr>
<td>None</td>
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<tr>
<td>Fall 2010 courses</td>
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<tr>
<td>Medical Imaging (G)</td>
<td></td>
<td></td>
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<tr>
<td>Stochastic Processes (UG)</td>
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<td></td>
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<tr>
<td>Spring 2011 courses</td>
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<td></td>
<td></td>
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<tr>
<td>Fourier optics (G)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Linear systems (UG)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please, include copies of “Student Perception of Teaching” summary forms for each class.

2. Doctoral and Master's Degree Committees
a) Number of doctoral committees chaired to completion: 0

b) Number of doctoral committees currently chaired: 2
   List student names: Diego Pava (CEECS); Rishi Silva (Physics)

c) Participation in doctoral committees: 2

d) Number of master's degree committees chaired to completion: 0

e) Number of Master students currently supervised: 0

f) Participation in master's degree committees: 0

3. **Peer Evaluation**

Include the Peer-evaluation Report (if available)

B. **Research and Other Creative Activities (from May 1, 2010 – May 1, 2011)**

a) **List all publications during the last calendar year:**

   a) Books

   b) Journal papers


   c) Conference papers

   D. Pava and W. T. Rhodes, "Low-Resolution Motion Analysis in a 3-D Model," in *Biomedical Optics*, OSA Technical Digest (CD) (Optical Society of America, 2010), paper JMA39.
http://www.opticsinfobase.org/abstract.cfm?URI=DH-2010-DTuB8

d) Others


Books published in Springer Verlag series for which I serve as Editor or Editor-in-Chief:

Photonic Microresonator Research and Applications, Vol. 156
Chremmos, Ioannis; Schwelb, Otto; Uzunoglu, Nikolaos (Eds.) 2010, ISBN 978-1-4419-1743-0

Industrial Color Physics, Vol. 154

Modern Theory of Gratings
Resonant Scattering: Analysis Techniques and Phenomena, Vol. 153

Progress in Nano-Electro-Optics VII
Chemical, Biological, and Nanophotonic Technologies for Nano-Optical Devices and Systems, Vol. 155
Ohtsu, Motoichi (Ed.) 2010, ISBN 978-3-642-03950-8

Integrated Silicon Optoelectronics, Vol. 148

Photonic Crystals
Physics and Practical Modeling, Vol. 152

Generalized Phase Contrast:
Applications in Optics and Photonics, Vol. 146

Laser Heterodyning, Vol. 149
Protopopov, Vladimir V. 2010, ISBN 978-3-642-02337-8
The Physics of Semiconductors
An Introduction Including Nanophysics and Applications
Grundmann, Marius 2010, ISBN 978-3-642-13883-6,

Introduction to the Physics of Electrons in Solids
Series: Graduate Texts in Physics
Alloul, Henri 2011, ISBN 978-3-642-13564-4

The Dynamics of Heat
A Unified Approach to Thermodynamics and Heat Transfer
Series: Graduate Texts in Physics

Atoms, Molecules and Photons
An Introduction to Atomic-, Molecular- and Quantum Physics
Series: Graduate Texts in Physics
Demtröder, Wolfgang 2010, ISBN 978-3-642-10297-4

Theoretical Mechanics
Theoretical Physics 1
Series: Graduate Texts in Physics

Lasers
Fundamentals and Applications
Series: Graduate Texts in Physics

Modeling Complex Systems
Series: Graduate Texts in Physics

The Physics of Solids
Essentials and Beyond
Series: Graduate Texts in Physics
Economou, Eleftherios N. 2010, ISBN 978-3-642-02068-1

Solid Surfaces, Interfaces and Thin Films
Series: Graduate Texts in Physics
Lüth, Hans 2010, ISBN 978-3-642-13591-0

Monte Carlo Simulation in Statistical Physics
An Introduction
Series: Graduate Texts in Physics
Submitted


f) List all research grants during the last academic year:
Classify research grants as (a) received grants, (b) submitted, but pending, (c) submitted but rejected. Indicate the title of the grant, type of the grant (Research, Equipment, or Service) your role (PI, co-PI, or Investigator), the amount, time period, and grantor.

Human Signature Phenomenology for Personnel Detection, research grant, PI, supported doctoral student Diego Pava through March 2010, Army Research Office (through Georgia Institute of Technology)

With A. Guzman in Physics, I co-authored a proposal for ~$100K to be submitted to the State of Florida jointly with the UCF College of Optics. The objective of the program was to establish clustering linkages in the imaging science and technology area between the two universities. Roughly a week before submission deadline I was informed by V.P. Research Moriarty that FAU would not support the submission of this proposal, that only “research priority area” proposals would receive FAU endorsement. Since an unendorsed proposal from FAU would damage UCF’s chances of success, I decided not to submit my own proposal.

HBOI postdoc program – co-supervisor with Fraser Dalgleish of Dr. Gero Nootz.

g) List participation in meetings of professional societies, special seminars, or other professional activities:

“Imaging through turbulence,” invited presentation for “Science Day,” EAFIT university, Medellin, Colombia, September 2010
Short course presentation on Fourier optics, EAFIT university, Medellin, Colombia, September 2010
Fifty years of laser development, invited physics colloquium presentation, National University of Colombia, December 2010
Advances in Imaging Technology, Invited workshop presentation, Cancun, July 2010
Lecture on basic laser physics in connection with short course on military applications of lasers, Las Vegas, July 2010
Member, Ives Medal Committee, Optical Society of America

h) List other items of significance such as awards, prizes, and special recognition by professional community, etc.:
5. Student advising activities

Daissy Garces, doctoral student, University of the Andes, Colombia, and Florida Atlantic University. Defending thesis May 2010.
Diego Pava, CEECS doctoral student, completed qualifying exam, well into doctoral research on imaging through long-path turbulence.
Rishi Silva, doctoral student, physics department FAU, preliminary research on physical parameters affecting high-resolution imaging through turbulence method.

C. Service

1. List membership and chairmanship on all committees, indicating the time spent in each during last year:

   Member, EE Academic Affairs Committee
   Member, College Graduate Committee (elected chair January 2011)
   Member, College of Engineering Personnel Committee
   Chair, CEECS ad hoc bylaws committee
   Member, College Policy & Development Committee
   Member, University Graduate Committee
   Member, University Graduate Committee Subcommittee on Due Process

2. List other service activities

   • Referee for Optics Letters, Journal of the Optical Society of America, Optical Engineering, Applied Optics, Information Sciences, and Optics Communications
   • Editor-in-Chief, Springer-Verlag monograph series on Optical Sciences (see below for list of volumes published in 2005)
   • Editor-in-Chief, SPIE Reviews (appointed October 2008)
   • Editor, Springer Graduate Texts in Physics series (appointed March 2009)
   • Associate Editor, International Commission for Optics Newsletter
   • General Director, International Centre for Theoretical Physics Winter College on Optics in Imaging Science, Trieste, Italy, 24 January through 11 February 2011
   • Co-PI and Program Chair, National Science Foundation Pan-American Advanced Studies Institute on Frontiers in Imaging Science, Bogota, Colombia, 7-17 June 2011
   • October 15, 2010, meet with advisors to the Colombian Air Force on issue of that organization’s program of research
   • As Director for 2010 Winter College on Optics, International Center for Theoretical Physics, Trieste, Italy. Organized Winter College on Imaging Science; scheduled for February 2011.
D. Other University Duties (where applicable):

1. Describe duties:

2. Evaluation by appropriate official:

Include your latest resume

ACADEMIC/RESEARCH PLAN FOR 2011-12

Present your academic plan:

(1) Plan to develop and offer new courses: title, semester, U or G

I will be teaching Optical Engineering for the second time and expect to request its listing as a regular course.

(2) Plan to develop online course: title, time schedule

(3) Other creative activities relating to academics

In June I direct an NSF-funded workshop on imaging science that I plan to leverage into academic opportunities for FAU.

Present your detailed research plan including detailed information on:

(1) Funded projects and potential buy-outs

(2) Ph.D. and Master students to be supervised

I will continue supervision of Diego Pava and Rishi Silva in connection with HBOI research on imaging through long-path turbulence.

(3) Potential publications (journal, conference, etc.)

One paper near completion with Daissy Garces, two with HBOI team nearly ready to write. I expect 3 papers at a minimum, almost certainly more.

(4) Proposals to be submitted (Tentative titles, Tentative amount, Agency/Industry, Your role (PI, Co-PI, etc.)
Imaging through long-path turbulence, to be submitted to NRL or ONR, jointly with Fraser Dalgleish at HBOI.