# PURC International Training

**Benchmarking Infrastructure Operations**

A Course in the PURC Advanced International Practices Program  
By the Public Utility Research Center  
University of Florida

**August 7-10, 2011**  
Gainesville, Florida USA

## Sunday, August 7th

<table>
<thead>
<tr>
<th>Times</th>
<th>Sessions</th>
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| 1:00 pm - 8:00 pm | **Registration – Lobby of Conference Center**  
Participants will receive their registration and program materials. |
| 2:00 pm - 3:30 pm | **Cost and Financial Concepts for Decision-Making** 1st floor – Dogwood Room  
- Incremental Analysis  
- Project Analysis  
- Real Options  
- Risk Assessment  
Mark Jamison, University of Florida |
| 4:00 pm - 5:00 pm | **Back of the Envelope Costing**  
- Interpreting Financial Statements  
- Estimating Service and Incremental Costs from Financial Data  
Mark Jamison, University of Florida |
| 6:00 pm - 8:00 pm | **Welcome Reception – Conference Center**  
Participants are encouraged to attend this informal reception to meet the course faculty, PURC staff, and their fellow participants. |
Monday, August 8th

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<tr>
<th>Time</th>
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| 7:30am – 8:30am | **Breakfast**  
Albert’s Restaurant, Florida Room |
| 8:30 am - 9:30 am | Session 1: **Overview of Program**  
- Understanding the political economy of benchmarking: “Who supports benchmarking? Who is threatened by comparisons? How can studies be misused?”  
- Sources of Conflict and Sector Performance: the role of evidence  
- Day by day Course Map  
Sanford Berg, University of Florida and Ted Kury, University of Florida |
| 9:30 am - 10:15 am | Introduction: **How to use your Kindle Reader**  
Eric Hanna, University of Florida IT Department |
| 10:15 am - 10:30 am | **Group Photo and Break** |
| 10:30 am - 12:00 pm | Session 2: **Case 1: Selecting Data**  
- Productivity, Efficiency, and Effectiveness  
- Identifying Inputs and Outputs, Stocks and Flows  
- Prioritizing Data Needs  
- Implications of Partial, Limited, or Incorrect Information  
- Conditioning and Environmental Variables  
Sanford Berg, University of Florida and Ted Kury, University of Florida |
| 12:00 pm - 1:00 pm | **Lunch**  
Albert’s Restaurant, Florida Room |
| 1:00 pm - 2:30 pm | Session 3: **Case 2: Confidence in Performance Comparisons**  
- Additional Inputs and Outputs  
- Additional Years (Trends)  
- Context and Governance Variables  
- Introduction to Robust Comparisons  
Sanford Berg, University of Florida and Ted Kury, University of Florida |
| 2:30 pm - 2:45 pm | **Break** |
| 2:45 pm - 4:30 pm | Session 4: **Back to the Basics**  
- Data Definitions  
- Evaluating Company Information Systems (sensors, data capture, data consistency, storage, analysis, decisions)  
- Checklist for Conducting Benchmarking Studies  
Sanford Berg, University of Florida and Ted Kury, University of Florida |
| 7:00 pm - 9:00 pm | **Dinner**  
Albert’s Restaurant, Florida Room |
## Tuesday, August 9th

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<tbody>
<tr>
<td>7:30am – 8:30am</td>
<td><strong>Breakfast</strong>&lt;br&gt;Albert’s Restaurant, Florida Room</td>
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<td>8:30 am – 10:15 pm</td>
<td>Session 5: <em>Alternative Methodologies for Measuring Performance</em>&lt;br&gt;• Key Performance Indicators&lt;br&gt;• Productivity Trends&lt;br&gt;• Statistical Analysis&lt;br&gt;• Data Envelopment Analysis (DEA)&lt;br&gt;Sanford Berg, University of Florida and Rui Cunha Marques, Technical University of Lisbon</td>
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<tr>
<td>10:15 am – 10:30 am</td>
<td><strong>Break</strong></td>
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<td>10:30 am – 12:00 pm</td>
<td>Session 6: <em>Case 3: Utilizing Available Software: Statistical Analysis</em>&lt;br&gt;• With Data from Cases 1 and 2, participants will utilize a standard software package to estimate production and cost functions.&lt;br&gt;• Evaluating Analyses&lt;br&gt;• What are the strengths and limitations of statistical methods?&lt;br&gt;• How sensitive are results to model specification?&lt;br&gt;Sanford Berg, University of Florida and Rui Cunha Marques, Technical University of Lisbon</td>
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<tr>
<td>12:00 pm – 1:00 pm</td>
<td><strong>Lunch</strong>&lt;br&gt;Albert’s Restaurant, Florida Room</td>
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<td>1:00 pm – 2:30 pm</td>
<td>Session 7: <em>Case 4: Utilizing Available Software: DEA</em>&lt;br&gt;• Using Data from Cases 1 and 2, participants will develop performance indicators&lt;br&gt;• The results will be shared and evaluated&lt;br&gt;• What are the strengths and limitations of statistical methods?&lt;br&gt;• How sensitive are results to selection of inputs and outputs?&lt;br&gt;Sanford Berg, University of Florida and Rui Cunha Marques, Technical University of Lisbon</td>
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<tr>
<td>2:30 pm – 2:45 pm</td>
<td><strong>Break</strong></td>
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<td>2:45 pm – 4:30 pm</td>
<td>Session 8: <em>Case 5: Communicating Results</em>&lt;br&gt;• Should the analyst present scores or rankings?&lt;br&gt;• Who are the different audiences for performance studies?&lt;br&gt;• Each Team will prepare a Press Release or Executive Summary for a different audience (Sector Ministry, Regulator, Top Management, the Press, a Consumer’s Association)&lt;br&gt;[Evening work: Finalizing the Press Release and Accompanying Graphics]&lt;br&gt;Sanford Berg, University of Florida and Ted Kury, University of Florida</td>
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<td>7:00 pm – 9:00 pm</td>
<td><strong>Dinner</strong>&lt;br&gt;Albert’s Restaurant, Florida Room</td>
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### Wednesday, August 10th

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| 7:30am – 8:30am | **Breakfast**  
Albert’s Restaurant, Florida Room |
| 8:30 am – 10:15 am | **Session 9: Evaluating Benchmarking Reports**  
Teams report will present their Press Releases. Points for discussion include:  
- Critiques of Reports  
- Comparing financial results with operating conditions;  
- Weights given to different factors (operations, financial sustainability, water resource sustainability, trends)  
- Lessons for Operators, Regulators, and Other Stakeholders  
Sanford Berg, University of Florida and Rui Cunha Marques, Technical University of Lisbon |
| 10:15 am – 10:30 am | **Break** |
| 10:30 am – 12:00 pm | **Session 10: Using Benchmarking Results**  
- Public Awareness (Transparency and Public Acceptance/Legitimacy)  
- Internal Incentives (Efficiency)  
- Regulatory Incentives (Effectiveness)  
- Price Reviews (X-factors)  
- Baselines, Trends, and Targets  
Sanford Berg, University of Florida and Rui Cunha Marques, Technical University of Lisbon |
| 12:00 pm – 1:00 pm | **Lunch**  
Albert’s Restaurant, Florida Room |
| 1:00 pm – 2:30 pm | **Session 11: Next Steps (Leadership)**  
- Current Capabilities  
- Adequacy of Data System  
- What are the challenges you face in the area of Benchmarking  
- Developing strategic plans for engaging allies, opposition, and other important players  
- Next Steps for YOUR organization  
- How can you be a catalyst for change?  
Sanford Berg, University of Florida |
| 2:30 pm – 2:45 pm | **Break** |
| 2:45 pm – 4:30 pm | **Session 12: Key Lessons**  
- Technical  
- Organizational (internal)  
- Strategic (external)  
Sanford Berg, University of Florida and Ted Kury, University of Florida |
| 6:30 pm – 9:30 pm | **Reception and Awards Dinner at the Thomas Center**  
*Bus leaves the Hilton at 6:30pm* |