

# Industrial and Systems Engineering

## Seminar

### ***Project Management: A Research Agenda and Resolving Parkinson's Law***

**Wednesday, October 8**

3:15 PM – Refreshments before the Seminar

**3:30 PM – Graduate Seminar**

**Mechanical Engineering Room 4125 A & B**



**Nicholas G. Hall**

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Project management has recently experienced remarkable growth in business interest, as shown by a 1000% increase in membership in the Project Management Institute since 1996. Today, one-fifth of the world's economic activity, with an annual value of \$12T, is organized as a project. This growth is largely attributable to new applications, for example IT, R&D, new product and service development and corporate change management, with different characteristics and requiring new methodologies. Yet projects still routinely fail to deliver on time, on cost and within scope. This talk outlines an agenda for project management research, including a detailed discussion of open issues that are both practically important and theoretically interesting. Within this agenda, one important topic is the widely observed behavioral phenomenon Parkinson's Law, which wastes the benefit from potential early completion of tasks. We describe an incentive compatible mechanism to resolve Parkinson's Law for projects planned under the critical path method (CPM). This scheme can be applied to any project where the tasks that are allocated to a single task owner are independent. Our scheme also resolves Student Syndrome. We further describe an incentive compatible mechanism to resolve Parkinson's Law for projects planned under critical chain project management (CCPM). The incentive payments received by all task owners under CCPM weakly dominate those under CPM, with the same guaranteed payment to the project manager. Finally, we develop an incentive compatible mechanism for repeated projects, where commitments to early completion continue for subsequent projects.

**BIO:** Nicholas G. Hall is a Professor in the Department of Management Sciences at the Fisher College of Business of The Ohio State University. He holds a Ph.D. in Management Science from the University of California, Berkeley (1986), as well as B.A., M.A. degrees from the University of Cambridge, and a professional qualification in accounting. His research interests are in tactical issues within operations management, especially project management, scheduling, supply chain incentives and pricing, and in applications of operations research. He has published over 70 articles in the journals *Operations Research*, *Management Science*, *Mathematics of Operations Research*, *Mathematical Programming*, *Interfaces*, and several other journals. He has served for a total of over 40 years on the editorial boards of *Operations Research* and *Management Science*. He has given over 300 academic presentations, including 89 invited presentations in 20 countries, and 7 conference keynote presentations. A 2008 citation study ranked him 13<sup>th</sup> among 1,376 scholars in the operations management field. He won the Fisher College Pacesetters' Faculty Research Award in 1998 and 2005. He has served as President of *Manufacturing and Service Operations Management* society (1999-2000), and is currently Treasurer of *INFORMS*. He served for five years on the State of Ohio Steel Industry Advisory Council. He has been a visiting professor at the Kellogg Graduate School of Management at Northwestern University, and the Wharton School at the University of Pennsylvania. He is the owner of a consulting business, CDOR, which provides business solutions to the Ohio business and government communities, as well as advice on intellectual property issues for New York City law firms.