

**Report of the External Academic Program Review Committee
for
The Department of Applied Statistics and Operations Research
College of Business Administration
Bowling Green State University
Bowling Green, Ohio**

Members of the Review Team:

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Research, Southern Methodist University, Dallas, Texas.

Karen Kafadar, Professor, Department of Mathematical Sciences, University of
Colorado at Denver and Health Sciences Center, Denver, Colorado.

Dates of Visit:

November 13-15, 2005 (visit schedule attached)

Executive Summary

Based on the departmental self-study and the interviews and meetings conducted by the review team during its visit, it believes the Department of Applied Statistics and Operations Research (ASOR) is a well run department working constructively within the College of Business Administration (CBA). By providing quantitative business administration courses for the BSBA and MBA programs and participating in the activities of the College, ASOR makes a substantial contribution to the well being of CBA. As a major partner in the two University graduate programs – MS in Applied Statistics (MSAS) and MS in Computer Science and Operations Research (MSCSOR) – the department is well established as an active participant in the life of the University. The MSAS program is healthy and provides a useful counterweight to the theoretical program of the Department of Mathematics and Statistics. The review team believes that it should be continued with proper support from the University.

The review team offers 13 recommendations for enhancing the effectiveness of the ASOR programs. These recommendations are listed in Section VI with no particular order. Three of the recommendations are highlighted below because they require structural changes.

Recommendation 1: The review team recommends the establishment of an MS program in operations research and operations management (MSOROM), in place of the

MSCSOR program. Such a program is likely to draw a larger enrollment and let the department play a major role in the program offerings of CBA.

Recommendation 4: The review team recommends the establishment of a Committee on Statistics by the University to bring together all faculties interested in statistical education and research.

Recommendation 10: The review team recommends that the scope of the Statistical Consulting Center (SCC) be expanded to include project work from external sources on a fee-for-service basis. It also recommends that such an expansion occur within the context of the CBA mission of Scholarship of Engagement through an office promoting selective management project work by the faculty for the benefit of the College.

Highlighting the three recommendations does not imply that the review team consider the others as less important. The distinction is that the other ten are rather easily and relatively quickly implemented. The remaining ten recommendations pertain to: graduate student support (Rec. 2); computers in classrooms (Rec. 3); course advertising (Rec. 5); student recruitment (Rec. 6); external student recruitment by faculty (Rec. 7); faculty trips for sponsored research (Rec. 8); data mining as a regular course (Rec. 9); faculty recruitment (Rec. 11); requiring statistical consulting in the curriculum (Rec. 12); and the third instructor position (Rec. 13).

I. Introduction

The subject of this review is the Department of Applied Statistics and Operations Research (ASOR), which is housed in the College of Business Administration, Bowling Green State University. The external evaluation team was asked to focus on the following aspects in its review by Dr. Mark Gromko, Vice Provost for Academic Affairs,

“The external review team should focus on the unit’s goals and plans for achieving those goals within the context of all information provided in the self-study. In addition, the team should offer its observations and insights about how the unit contributes to the mission and plans of the college, other academic units, and the university as a whole. The Provost and dean have the final responsibility for assessing these aspects of the unit and its programs.

The team’s recommendations should focus on improvements that can be made using institutional and extramural resources that currently are available to the program. If recommendations are made for changes that would require additional institutional resources, the need and priority for additional resources should be clearly specified.”

Before the review team arrived on campus it had received a self-study (with appendices) prepared by the department from Dr. Gromko, along with a list of key items to be covered in the report. These are: quality of the self-study; strengths and weaknesses

of the department, faculty productivity, administrative leadership and environment, and future plans for the department. These and other relevant issues are addressed in this report.

As indicated in the attached schedule the review team started with a breakfast on the 14th of November, 2005 with Dr. Mark Gromko, in which it was apprised of the details of the review process, basic issues for consideration, and what was expected from its evaluation. During the rest of the day the review team met all except one of the faculty (Professor Rump was in San Francisco attending the INFORMS National meeting); representatives from the Departments of Mathematics and Statistics, and Computer Science, and selected students from MSAS, MSCSOR, and MBA programs. The lunch was with Dr. James McFillen, Associate Dean for Graduate and Executive Programs in the College of Business Administration and Dr. John Hoag, Chair of the Department of Economics. The team had dinner with the chair of the department Dr. Madhu Rao, at which some lingering questions were answered. The review team had exit interviews on Tuesday, November 15th, with Dean Nancy Merritt of the College and Dr. Mark Gromko. Since returning to their respective campuses, the team members have had telephone conversations with Dr. Madhu Rao to clarify further issues that arose while writing this report. The review team members have also had telephone conversations with Professor Rump for his input.

II. The Self Study Report

The self-study report prepared by the department was excellent in quality and complete in presenting the issues faced by the department. It was very helpful to the review team both before and during its visit. The 63 page report included mission and history; description of the unit, programs, and policies; self-evaluation; and unit planning. Twenty eight tables and three figures provided supporting quantitative information. A compendium of appendices, given as a separate volume, provided additional information needed for the evaluation. Whatever information that was missing from the self-study was readily available on site.

The Department of Applied Statistics and Operations Research (ASOR) has eight tenured/tenure track faculty positions, of which one is vacant. The vacant position is being filled with an Assistant Professor in Applied Statistics. When the position is filled, ASOR will have 5 faculty in statistics (one Professor, two Associate Professors and two Assistant Professors) and 3 faculty in OR (two Professors and one Associate Professor). In addition there are three instructors; two instructor positions are permanent and one position is available on an “as needed” basis. Excluding the instructors, among the seven regular faculty members, two are women (one Associate and one Assistant). Generally, the teaching load is three courses per semester for regular faculty and four per semester for instructors.

The department’s major contribution to CBA is in providing the quantitative management courses for the undergraduate and graduate programs in business administration. During 2004-2005, ASOR taught 55 sections in such courses (25 in the

fall, 20 in the spring, and 10 in the summer). These courses are Stat 200, Stat 211, Stat 212, OR 380, Stat 601 and 601X, and MBA 601 and 601X (X indicates Executive MBA). The undergraduate courses normally have enrollment averages of 30 to 40 and graduate courses have enrollment averages of 20 to 30. Other courses regularly taught by the department (except for three OR courses, and one statistics course) all have enrollment averages of 10 to 20. The regression analysis course in statistics has somewhat more (an average of 26), while the three OR courses (Linear and integer programming, probability models, and network analysis) have averaged in the 6-8 range.

The department offers graduate programs in collaboration with the Department of Mathematics and Statistics, and the Department of Computer Science. The Master of Science in Applied Statistics (MSAS) program has 2005 fall head count of 16 from ASOR and 7 from M&S for a total of 23. The Master of Science in Computer Science and Operations Research (MSCSOR) has a fall head count of 5 (CS Department shows the head count as 6). The MSAS program is identified as a joint program while the MSCSOR is only a specialization under MS in Computer Science.

Professor Boudreau (Statistics) directs the Statistical Consulting Center (SCC) for the University with assistance from one of the instructors. Both Professor Boudreau and the instructor devote half-time responsibility to SCC. To compensate for this release time from the department, the Graduate College allocates to the department four additional half time graduate assistantships. In all, the Graduate College allocates to ASOR an equivalent of 12.5 half time assistantships (\$112,725) for the MSAS program and 5.1 half time assistantships (\$40,105) for the MSCSOR program.

The department summarizes its teaching and research philosophy as follows (self-study, p. 3)

“In teaching, we strive to refine the students’ quantitative reasoning skills and contribute to their knowledge and understanding of Statistics and Operations Research. We emphasize the intelligent use of Statistics and Operations Research, the ability to communicate results clearly and concisely, and the need to approach problems with creativity and common sense. Our ultimate goal is to contribute to the overall intellectual growth of the students and to produce graduates who are capable of independent and critical thinking and prepared to realize their full potential and play a leadership role in society.

Although the Department encourages all academic research that advances knowledge in the disciplines of Statistics and Operations Research, it considers contributions to the applications of these disciplines to be its primary research mission. We encourage our faculty to expand and apply their knowledge through independent research and through collaboration with, and professional service to, researchers in other disciplines in the College of Business Administration and the University. The Department also values contributions of a theoretical nature in the disciplines of Statistics and Operations Research because a strong background

in and understanding of the theoretical foundations of these disciplines is essential to be effective in their applications.”

The review team believes that the department is structured well to accomplish this mission.

III. Strengths of the department

A. Excellent training in applied statistics and operations research

Students are very satisfied with the quality of the programs offered by the department (MSAS, MSCSOR) and the college (MOD, MBA), as evidenced by on-site interviews of eight current students and responses from program alumni to the department's mail-in survey (conducted in the summer of 2005). Three of the eight interviewed students plan to pursue a Ph.D. degree after their M.S. degree and hence welcomed opportunities to participate in research projects here as part of their program (see Recommendation 10). Students acknowledged some confusion over the information presented on the web site; e.g., consequences of the choice of home department for MSAS degree; list of OR classes that satisfy the CS requirement for the MSCSOR degree; distinction between courses when registering for a course with multiple labels (see Recommendations 5 and 6).

B. Fine working relationships among faculty and working environment in ASOR department

The faculty interviewed by the review team acknowledged excellent working relationships with their colleagues in the department (congeniality, cooperation, and appropriate guidance and mentorship).

C. Admirable cooperation with other departments on two M.S. programs

Although issues arise in connection with cosponsoring joint M.S. programs (admission requirements, differing amounts of assistantships, etc.), in general ASOR cooperates well on administrative matters.

D. Statistics Consulting Center (SCC) as an excellent resource for faculty, students, and staff at the University

The support of the SCC is a highly worthwhile investment, as it increases the productivity of the faculty and students, and assists with preparation of grant proposals and journal articles. The SCC director acknowledged a decrease in the number of requests due to the elimination of the MBA project requirement and the proliferation of statistics packages; still, the SCC receives a healthy number of requests (about 150 consulting requests) per year. The elimination of MBA project requests provides an opportunity for the SCC to engage in external projects from the community (see Recommendation 10).

E. Conscientious leadership

The chairman of the department is conscientious in his duties, supports research productivity as allowed by the budget, and responsive and encouraging to faculty and student needs.

F. Adequate student advising

Students noted no problems with either the access to their advisers or the quality of the advice from them.

G. Positive movement towards addressing issues raised in student alumni survey

The department has responded to the issues raised in the alumni survey by offering courses in data mining and statistical computing (SAS, Minitab) (see page 33 of the self-study).

H. Faculty involvement in the scholarship of engagement

As evidenced by the listing on Table 14 of self-study, faculty members have been involved in projects with business and industry on problems such as scheduling military training, production planning, lot size determination, etc.

I. Excellence in teaching and service

Student evaluations indicate consistently high quality of teaching by faculty and instructors in the department. The instructors for Stat 211 and 212 have been particularly proactive in their use of technology and innovation in the classroom. In addition, faculty service and active participation on college and university committees (see Appendix J of Self-study) is highly commendable and well appreciated at the upper levels of administration.

IV. Areas for Improvement

A. Participation in two jointly-administered programs presents challenges in administration (see Recommendation 1)

B. Inadequate advertisement of class offerings to other departments (see Recommendation 5)

C. Low enrollment in MSCSOR (see Recommendation 1)

D. Inadequate graduate student support (see Recommendation 2)

E. Improved faculty research coordination

In light of rather high teaching loads, low budget for travel, and the department's mission that focuses on service and applications, the faculty are adequately productive in research and publications. Two faculty are participating on grant proposals, and the faculty averages overall about one publication per year, per faculty member. With the applied orientation of the department and the high teaching loads it would be unrealistic for the university to expect individual research grants from agencies such as NSF and NIH. However taking advantage of available university resources for travel to conferences could enhance their visibility (see Recommendation 8). In addition, the review team believes that an opportunity exists for the department to contribute to both the teaching and research missions of the university by coordinating their combined talents in design and analysis of experiments, sampling, and computational methods to engage in research projects involving the analysis and inference from massive data sets and streams (see 1992 NAS report on Massive Data Sets and NAS report of a workshop on massive data streams). Businesses and industry are increasingly confronted with huge data sets that cannot fit into the paradigm for loading the entire data set into a SAS data frame; and data base management cannot solve the problem of analyzing streaming data (credit card transactions, stock market trades, internet traffic data, etc.). Given the camaraderie in the department, their areas of expertise, and their access to important problems in business and industry, the department might actively engage in opportunities to pursue coordinated research in this area. (See also Recommendations 1 and 10.)

V. Strategic plans and proposed program of implementation

The review team endorses the department's plans and directions (pages 57-61 of self study report), with emphasis on some specific plans noted below (see Section VII, Recommendations). The review team was informed of some earlier proposals to consider the establishment of an "Institute for Applied Statistics and Operations Research." We agree with the department's conclusion that, to date, the faculty and staff have been successful in carrying out their plans through existing channels without this institute. Furthermore, Recommendation 10 on the expanded role for the Statistical Computing Center can accomplish this objective without establishing a new entity.

VI. Issues for consideration

A. Statistics courses within BSBA program

It was noted that the second year of the BSBA program may be too heavy, as it includes two economics courses and two accounting courses in addition to two statistics courses. Students may be better served by moving the statistics courses to the third year, when the concepts learned from the previous two years have settled and the students are better able to appreciate the power of statistical methods in their future employment. The review team suggests that the College curriculum committee consider this issue for resolution.

B. New approaches to teaching

Students today will encounter far more complex and challenging data sets that were encountered when many of the faculty took statistics. Methods of dealing with data overload, extraction of important information from data, and combining data of diverse types (text, image, and voice) from disparate sources (government data bases, financial transactions records, communication logs) need to be addressed. Faculty can communicate these challenges to students and prepare them to think critically about how to handle them, by exposing them to large data sets in both their lectures and problem sets.

C. Distance education

Some universities (e.g., Iowa State University) have been very successful in marketing their M.S. degree program in statistics to employees in industry that have video-conferencing capabilities. Considerable coordination is required at the university level as well as by the department that offers such courses (e.g., faculty office hours for telephone inquiries; transmitting and receiving homework assignments and tests in a timely fashion; on-site coordinator); but, once these problems have been solved, the process can be applied to multiple courses and degree programs. The income from these distance education courses can be a considerable incentive to both the department and the university.

D. Interdisciplinary grant proposals

Most funding agencies today recognize the value of interdisciplinary collaborations and accordingly select such proposals for funding. The College or the University may wish to support a faculty member, via a one-semester course release, to coordinate the resources and prepare a proposal accordingly. Two mechanisms at NSF that emphasize interdisciplinary collaborations are VIGRE (Vertical Integration of Graduate Research and Education) and IGERT (Interdisciplinary Grants in Education, Research, and Training). While competition is strong, the review team believes that BGSU can be successful due to its strong emphasis on education and its success in promoting students into graduate programs. This may also help to address Ph.D.-bound students with being engaged in research projects in the department. If the proposal includes funding for graduate students, such funds can be placed in a general account and distributed as stipends to augment the assistantships offered by the departments.

VII. Recommendations

1. Graduate programs in applied statistics and operations research

The MSAS program has a very good reputation and its graduates are being admitted to several major universities for doctoral degrees. With a 2005 fall headcount of 23, it is active and healthy; as a senior partner in its administration, the Department of ASOR can be proud of its achievement. The review team recommends that the program

be retained with perhaps a minor addition of a required statistical consulting course (see Recommendation 12).

The situation with MSCSOR, though, is much different. ASOR is a junior partner in its administration. It is structured as a specialization under the M.S. degree in computer science; the CS department thus feels the need to enforce the heavily CS-focused admission requirements with a rigid policy and would like to keep it so. Proficiency in computer usage has permeated even to the high school level; furthermore, CS is beneficial and is a useful component of any quantitative M.S. program. However, the practice of OR does not require it. Therefore the review team recommends that the department should explore other ways of providing a master's program with OR as a major component that includes adequate CS courses. The department has stated in its self-study that after exploring several alternatives, it has concluded that continuing with MSCSCOR is the best option. The review team believes that further effort to find a better solution will be worthwhile, if the department is willing to terminate its collaboration with the computer science department.

An option that has several advantages to ASOR as well as CBA is the establishment of a Master's program in OR and another discipline or a discipline group within CBA. Two obvious candidates are supply chain management and management information systems. To encompass a broader group of disciplines within CBA, such a program could be named Master of Operations Research and Operations Management (MSOROM), which could include the current OR portion of MSCSOR and operations management courses from supply chain management, MIS and/or production management taking the place of CS courses. The advantages to this option include: (1) MSOROM will provide the quantitative alternative to MBA; (2) A larger applicant pool is very likely to result; consequently enrollment in the program will most likely increase; (3) The bond between CBA and ASOR gets stronger and ASOR becomes integral to the program offerings of CBA; and (4) The research philosophy of the ASOR Department states that contributions to the applications of statistics and OR is its primary mission. Collaboration with other disciplines in the College is a desirable outcome to fulfill this mission.

While implementing this recommendation to establish a Master's program in operations research and operations management, the review team also recommends that the Graduate College set the level of graduate student support at double the current level of 5 half time assistantships allocated to the MSCSOR program.

The review team does not object to the continuation of MSCSOR in the present form if the CS department would like to maintain it as a specialization for its students. However, if the department, CBA and the University decide not to establish MSOROM, unless the CS Department revises its admission requirements to make them more flexible in order to admit prospective OR students, the ASOR should not expect increase in MSCSOR enrollment. It is primarily a program for computer scientists who may consider a later move into mathematical modeling.

This recommendation is based on the rationale that for a graduate program in OR, computer science is not the best companion. OR needs computers to solve problems; but it does not need computer science to a degree of sophistication that would come with a graduate program in computer science. OR is much more compatible with disciplines such as industrial or systems engineering. Therefore OR programs in schools of engineering are generally combined with industrial/system engineering. In colleges of business OR should seek partnership with operations management to be successful. The result of such partnership is likely to make the program a healthy mix of theory and applications without any conflict of pre-requisites or product outcome, as it is now with computer science.

2. Overall support for graduate students

The review team recommends that the Graduate College work toward increasing the stipend levels set for Master's level I-III programs across disciplines. Furthermore it also recommends to move computer science and operations research into Master's Level III from Master's Level I.

This recommendation is based on two observations: (1) Graduate assistantship levels nationwide are much higher than those at BGSU and (2) computer science and operations research are mathematical science disciplines and if they are not treated in par with mathematics and statistics, attracting students to these programs is very difficult. The attraction of industrial jobs is stiff competition for mathematical science graduates. One further note is that the 2005-2006 NSF Fellowship for doctoral students in the sciences, including social sciences, is \$30,000.

Two other mechanisms for increasing the stipend to students are (a) inclusion of graduate student support on submitted grants and contracts; and (b) involvements in projects awarded to the SCC. Funds from these two sources can be placed in a separate account and allocated consistently.

3. Technological innovations in the classroom

The instructors for the lower division courses acknowledged insufficient availability of classrooms with computers and/or computer hookups. To remain a leader in undergraduate instruction, the university may have to invest resources for additional technologically advanced classrooms. The review team recommends such action.

4. Committee of Statisticians

The review team strongly recommends the creation of a formal committee consisting of statisticians from all departments at BGSU. The Committee should be charged with the task of identifying statistical resources on campus (which courses are being taught in which departments and their content and level) and to work towards the establishment of genuinely interdisciplinary collaborations and a graduate program in statistics. This recommendation comes from the observation that the proposed Ph.D. program in mathematical statistics from the Department of Mathematics and Statistics does not

provide any additional strength to the University's degree offerings. (Representatives from the statistics program in the mathematics and statistics department acknowledged that the proposal is merely a "name change" from "Ph.D. in Mathematics with specialization in Statistics" to "Ph.D. in Statistics.") The Committee on Statistics could provide additional strength to the proposed program through interdisciplinary collaborations, research, teaching, and advising.

5. Advertisement

Several students commented that they were unaware of course offerings that they would have taken had they known of their existence. The review team recommends that notices of course offerings be well advertised to all potentially interested students in various departments and colleges. The Committee on Statistics recommended under Rec. 4 above, can assist with the distribution of notices throughout the university as well as an improved, coordinated web site.

6. Student recruitment for MSAS and MSCSOR programs at BGSU

The review team recommends that the Graduate College assist the department to improve the web sites for these programs, and to better direct students to degree program options for jointly administered programs. Currently confusion exists among applicants, particularly with respect to the implications and consequences of choosing a "home department" for the MSAS degree.

7. External recruitment

The review team recommends that the College make available the resources for focused recruiting trips by faculty to four-year colleges around the midwest.

8. Support for external grant inquiry trips

The review team recommends that the faculty be encouraged to take advantage of funds available from the office of sponsored programs to attend workshops designed to assist participants in writing successful proposals for external grants and contracts. (ASA-NSF holds one such workshop in May in northern Virginia.)

9. New courses

The review team recommends that the department be encouraged to offer their recently developed course in data mining on a regular basis. Given the overwhelming size of data sets and streams, such a course will be attractive to both full-time students and executive MBA students.

10. SCC expansion

The review team strongly recommends that the SCC be encouraged to expand its role to include clients external to the University on a fee-for-service basis. Clients can present either short-term projects with services provided in accordance with a fee schedule, or longer-term projects under sponsored research. Statisticians are well trained to identify types of expertise needed to solve a problem and hence can be instrumental in coordinating the necessary talent required to solve a complex problem. One model for such an expansion is a “clinic”. Students enroll in a semester-long course to work on a problem proposed by the client, and present at the end, both oral and written reports of the solution. Such a clinic has several benefits: (a) encourages the development of student skills in problem-solving, teamwork, and oral/written communications; (b) brings in external funds to the College/University; (c) enhances the reputation of the university (“scholarship of engagement”); and (d) provides valuable contacts with the community.

The review team recommends that the leadership to attract external clients be provided by an office within the College (e.g., a Management Studies Center) and SCC be used as a consultant. This arrangement expands the scope of this recommendation to the entire College so that the College can take this initiative under its program of scholarship of engagement.

11. Recruitment of faculty

The review team recommends that the department emphasize in its search for a faculty member talents that complement existing talents, such as time series, survey methodology, and data mining. In addition, due to the continually increasing importance of biotechnology, some familiarity with biostatistics and bioinformatics would be desirable.

12. Required course on Statistical consulting

The review team recommends that a statistical consulting course be required for the completion of the MSAS program. Credit may be awarded for successful participation in projects in the Statistical Consulting Center.

13. The third instructor position

Under the present environment, the enrollment in ASOR courses are likely to continue at least at the current level. Therefore, to provide continuity and to attract better candidates, the review team recommends that the College provide the financial (hard line) support for the third instructor position.

**Department of Applied Statistics and Operations Research
External Reviewers Visit
November 13-15, 2005**

Sunday, November 13

- 2:21 p.m. Professor Narayan Bhat arrives at Toledo Express
(AA #4351 from Chicago/O'Hare)
Chair will receive, have lunch and drop at Hampton Inn
(confirmation # 86906475)
- 6:00 p.m. Professor Bhat has dinner with Mark Gromko and a PRC
member
- 8:56 p.m. Professor Karen Kafadar arrives at Detroit Airport
(UA #248 from Denver)
Chair will receive (with Herb McGrath) – Dinner??
Drop at Hampton Inn (confirmation # 86906475)

Monday, November 14

- 7:30- 9:00 a.m. Reviewers breakfast – Mark Gromko
- 9:00- 9:30 **Reviewers meet to plan the day's activities**

All meetings will take place in BA 277.

- 9:30-10:00 Meet with Herb McGrath
- 10:00-10:30 Meet with Danny Myers
- 10:30-11:00 Meet with Nancy Boudreau
- 11:00-11:30 Meet with Hanfeng Chen
(Mathematics and Statistics Department)
- 11:30-12:00 Meet with Arthur Yeh
- 12:00-12:30 p.m. Meet with Jim Albert
(Mathematics and Statistics Department)
- 12:30- 2:00 Lunch (at Bowling Greenery) with John Hoag (Chair,
Department of Economics) and Jim McFillen (Associate

Dean for Graduate and Executive Programs, College of
Business Administration)

2:00- 2:30	Meet with Jane Chang
2:30- 3:00	Meet with Larry Dunning and Ron Lancaster (Computer Science Department)
3:00- 3:30	Free Time
3:30- 4:00 Kapani	Meet with Diane Conway, Leigh Devine and Neetika (Instructors, Department of ASOR)
4:00- 5:00	Meet with MSAS, MSCS/OR and MBA Students
5:00	Chair takes reviewers to Hampton Inn
6:00 - 8.30	Chair joins reviewers for dinner
8.30 – 11.00	Reviewers meet to discuss the outline of the report

Tuesday, November 15

8:00- 9:00 a.m.	Reviewers breakfast and discuss report
9:00-10:00	Reviewers meet with the Chair of the Department
10:00-10:45	Meet with Nancy Merritt (Dean's Office)
11:00-12:00	Meet with Mark Gromko (McFall Center)
12:00-1:00	Lunch (at Bowling Greenery)
1:00	Chair drives Professor Bhat to Toledo Express Airport (AA 4352 to Chicago/O'Hare, leaves at 2.51 p.m.)
3:30	Arthur Yeh drives Professor Kafadar to Detroit Metro Airport (UA 539 to Chicago/O'Hare, leaves at 6.38 p.m.)
11/8/05	