**Course description**

This course introduces computer-based tools for planning, policy analysis, and decision making. Topics include administrative and policy models in spreadsheets, making decisions with multiple criteria, forecasting and simulation, database construction and information management, and an introduction to probability and decision trees. This is a core course for the MPA at Rockefeller College.

**Assumed prerequisites**

This course assumes that you have basic familiarity with microcomputers and spreadsheet software such as Microsoft Excel and are familiar with college-level algebra as covered during the departmental Welcome Week program. Indeed, the first assignment asks you to turn in the Excel worksheets that you completed during Welcome Week. A series of additional tutorial sessions can be scheduled for the first two weeks of class for students who wish to polish up their computing skills. We expect that all students in the class have either passed the diagnostic quiz during Welcome Week or have completed the assigned Math Refresher units. It is your responsibility to attend the labs if you need a refresher or additional assistance using Microsoft Excel, including but not limited to using formulas, creating charts and graphs, and embedding Microsoft Excel object in Word spreadsheets. If you have any questions about these prerequisites, please see your class instructor as soon as possible.
Course Goals

This course prepares students to work with data and models in a public policy setting. The ultimate goal of this course is to enable students to use, synthesize, and analyze data for the use in public policy decision making. By the end of the course, students will understand the role of diverse stakeholders in the public policy making process, and understand the role of public policy analysis in decision making. Students should leave this course with the ability to use a variety of software packages, including Microsoft Excel, Access, and Vensim modeling software. Students will also be able to present and discuss their results in a sophisticated and well thought out manner to a variety of audiences.

Purposes

Data, Models, and Decisions I is an introduction to computer-based tools for planning, policy analysis, and decision making. The course has three goals:

To develop technical skills in the use of microcomputers, especially electronic spreadsheets, databases, communications tools, and an introduction to the Web.
To develop sophistication in the application of computer-based tools to the tasks of public administration and policy, including planning, policy analysis, and decision making.
To gain the skills and insights necessary to manage information resources in a public or not-for-profit agency including elements of database management and networked information transfer.

To connect decision making about information strategy and management, and decision making supported by formal computer-based models to the five core public service competencies as defined by NASPAA

Within the master's program in public administration and policy the course is designed to provide the computer and quantitative skills necessary for PAD 505 Data, Models, and Decisions II and other core courses, and to open up areas of study in information management and policy analysis at the 600-level.

A “Mega Case” and the Five Public Service Core Competencies

Over the past several years the department has been working to reorganize our core classes more clearly around five public service core competencies as defined by the National Association of Schools of Public Affairs and Administration (NASPAA). The five NASPAA competencies are:

| #1 The ability to lead and manage in public governance |
| #2: To participate in and contribute to the policy process |
| #3 To analyze, synthesize, think critically, solve problems and make decisions |
| #4 To articulate and apply a public service perspective |
| #5 To communicate and interact productively with a diverse and changing workforce and citizenry |

The bulk of the detailed problem sets in the class are aimed at the third competency that stresses analysis, synthesis, critical thinking, problem solving, and decision making. But clearly, these critical analytic skills need to be enacted and understood broadly in the context of the other four NASPAA competencies. To help make these connections, you will see a “mega case” threaded throughout this class.
The mega case involves local decision makers from the Gulf Coast who are working with the US Army Corps of Engineers to rebuild in the wake of post-Katrina. Their disaster preparedness decisions must be robust over a long time horizon—indeed over a time horizon where global warming could be an important factor. This mega case stresses how formal models can help to clarify decisions in the face of competing stakeholder interests and highlights important leadership challenges in coming to final decisions. The mega-case is referenced in specific problem sets (see assignment schedule) and for course memos. It is very important that students read and integrate the concepts and information from the case study into their memo and problem set assignments.

Required Reading material

Course materials on Blackboard include assigned readings, all problem sets, worksheets, and prior midterm and final exams. These texts are in stock at Mary Jane Books. You may also find these course materials online at vendors such as Amazon or eBay.


Recommended texts

Several recommended texts provide extra support for selected aspects of the course. For example, you may wish to seek out a manual to help you with Excel and Access. I have ordered several suggested texts from Mary Jane Books, but do not recommend that you purchase them until you (or your homework group) have had a chance to evaluate how helpful they will be to you.

   Upper Saddle River: Pearson Prentice Hall.
2. For Access—Use ITS ACCESS Tutorial Materials on the Blackboard

Recommended software

Microsoft Office Professional or later versions (Word, Excel, and Access; PowerPoint is also useful). Office 365 will be used in the laboratory and classroom. Earlier versions should also work for most class activities, although there are sometimes slight differences in commands and programming statements. Be sure to check what versions your workgroup members are using so that files may be exchanged electronically.

Office 365 is available free of charge to all students with a valid University email address. To install Office 365 on your own computer, sign into your University email account and click the tool icon in the upper right corner. Select Office 365 Settings. Once you have arrived at the new page, select the option...
to download Office 365. The software is valid as long as your email account is active and may be installed on up to five devices. Additional assistance with the Office 365 software is available through the University. Please speak with the course instructor as soon as possible if you have difficulties accessing the software. Appendix 1 contains more detailed instructions.

Assignments

Weekly assignments: Weekly assignments are due at the next class. Assignments include readings in the required texts, problem sets, and case studies.

Readings: have been marked for skimming, reading, or reviewing on the detailed list of coursework for your convenience. It is expected that you complete the readings every week and come to class prepared to discuss or bring questions about topics that you may find confusing.

Problem sets: There are two sets of problem sets that will be due each week. The first problem set deals with the basic concepts covered in the previous class. The second problem set deals with the concepts covered in class in the context of the Pointe Claire Case, the major case that we will be using throughout the course. Each problem set will weigh equally in your on-time and complete problem set portion of the final grade. Problem sets should be completed and submitted to Blackboard before class each week. Late problem sets will receive a grade of 0. The course TA is not permitted to grade late problem sets.

Each problem set should be submitted as a word document (except when the use of Access is required, you will receive separate instructions for those assignments) with excel graphics or “paste special-ed” into the document as pictures. You must also submit the excel file that includes your work. If you are unsure of how to embed or paste special Excel graphics into a word document, you must attend the basic Excel lab that is offered outside of class. If you are unsure of how to use Blackboard to submit assignments, please attend the first lab that is offered outside of class. I will instruct the TA not to grade assignments that are not submitted correctly.

The assignments are a place to develop understandings and skills. For the problem sets and worksheets, you are encouraged to work on assignments in small groups and to help each other acquire skills and understanding. Workgroups will be organized during the first class. However, you are required to submit a write-up for each assignment that is completed individually. It is not acceptable to submit the same write-up or spreadsheet or database or Vensim model as a classmate, unless explicitly approved by the course instructor. Students that submit the same write-ups or spreadsheets or databases or Vensim models without explicit permission of the instructor will be subject to the disciplinary measures explained in more detail below.

The course teaching assistant will read the work you submitted to check for completeness, commenting on it as time permits, and recording the assignments that were handed in on time and complete. Each assignment will be graded as “1.0” for being on time and complete and “0” if it is not turned in. If you have further questions about a specific problem set or would like more detailed feedback, it is your responsibility to arrange a time to speak with the TA or course instructor if there is not enough time to review the problem in class. The TA may deduct partial points for missing portions of the assignment or for portions where substantial effort is not evident. A rubric for course problem sets is attached in the appendix.
You may not create a “group” answer and then make photocopies to turn in, and when an assignment requires building a computer product (such as a spreadsheet or database), each member of your group should create that product individually (although you may compare details and help each other in your working groups). Please do not submit multiple worksheets for each problem set.

Detailed description of course assignments:

Basic Concept Problem Sets: The basic concept problem sets are meant to help you practice basic topics introduced in class. They represent opportunities for you to learn the mechanics of decision trees, MAU models, System Dynamics, and database topics. These are the basic building blocks of policy analysis for this course. If you find you are struggling, it is your responsibility to see the TA or Instructor for review or guidance.

Pointe Claire Problem Set: The Pointe Claire problem sets require that you demonstrate an advanced ability to apply the topic covered in each class and to synthesize that topic with the Pointe Claire case. These assignments require that students think carefully about the topic of the week and the Pointe Claire Case study. The Pointe Claire/auxiliary problem sets are good examples of questions you might see on the midterm and final exams, so be sure to bring any questions about the assignments to class or to arrange to meet with the TA or instructor if you find you are struggling with these assignments.

Case Study Assignments: There are two individual case study assignments and two group case study assignments. These assignments should be printed out and handed in as well as being submitted to Blackboard. The due dates are in the schedule table and they will show up in Blackboard, too. The rubrics and instructions for these assignments are attached as appendices to this syllabus.

Pay Attention to Group vs. Individual Authorship of Case Study Material.

Some of the mega case material is assigned as a group assignment. For these assignments, you may turn in one memo or PowerPoint show for your whole group. However, other case materials take the form of individual memos. These portions of the case work are intended to be individual writing assignments. If you have any questions about whether group work is allowed, get further clarification from the course instructor. Please pay close attention to the instructions that accompany the various case assignments.

Policy on Late Assignments

Assignments are due at the defined times. For problems sets that are not submitted on time, a grade of 0 will be assigned (this is a big penalty, so don’t submit late assignments). The course TA is NOT permitted to accept any late submissions. You have to discuss getting permission for late submissions directly with the course instructor.

Course communication

To reach me, use my personal e-mail address. If the class must be canceled on short notice, the announcement will be made through e-mail. All e-mail communication that I make with you will be through the e-mail that you have on file with U-Albany so check your information in MyUAlbany to make sure you have the correct email address listed.
The section instructors and the course TA have provided telephone numbers for your convenience in scheduling appointments or answering course related questions. Please be considerate, and do not call or text at 2AM! The instructor and the course TA will discuss their preferred methods of communication during the first class meeting.

**Laboratory Sessions**

TA lab and office hours are as listed on the front page of this syllabus. Attendance at labs is optional, however, they are the place where most computer hardware/software questions will be answered and where help on homework and concepts will be available. Due to the intensive nature of the course and the breadth of topics that must be covered, there will not always be time to review assignments or advanced software skills in class. Therefore, it is your responsibility to attend labs or office hours if you find that you are struggling with the course material or have specific questions about the material that are not covered in class.

During the lab and office hours, you will be able to meet with the TA individually or in small groups to discuss issues related to the current assignments. I also have my office hours as listed on the front page of the syllabus. The PAD 504 team office hours are listed in the following table. Feel free to visit one of us during our office hours if you have any questions or concerns.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD504: 5:45 to 8:35</td>
<td>SunYoung Pyo: 5:30PM – 7:30PM</td>
<td>Janet Mayo: 6:00PM - ?</td>
<td></td>
<td></td>
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**Exams and Grading**

Grades will be assigned on the A – E system.

Grading is based on the following weights:

- *Midterm Exam 25%*
- *Final Exam 25%*
- *On Time and Complete Problem Sets 30%*
- *Graded Cases 20%*

I will also factor in class participation. I will use attendance and participation as a “tie-breaker” if the grade falls at or near a “break-point” between grade levels. For instance, a person who has contributed regularly to class discussions and has a B+/A- average on the graded materials is more likely to receive an A- than a person who contributes less regularly.

The midterm exams will be administered in class. The final exam will be a take-home exam that is administered during the final exam period outside of normal class time. I will post the exam one week before the scheduled final exam time, and you will have one week to complete and submit the exam through Blackboard.

**Grading and appeals for grade change:** If you are dissatisfied with your grade or think I made an error, you may make a written appeal describing why you think your grade should be changed. This appeal should be typed and be delivered to me (in person or by email) within 48 hours of receiving your
Time commitment for this course

This is a four-credit graduate course. Hence you should plan on spending four hours per week in class plus approximately eight hours per week doing the reading and preparing problem sets, cases, and attending auxiliary labs. Students with strong prior background or experience in computing may spend less time than this. Students with little prior background may have to spend more time than this, especially in the first several weeks. If you discover that you are spending more time than this on the course, please let me know so that we can discuss how to adjust class workload.

Plagiarism and cheating

As students of the Rockefeller College of Public Affairs & Policy, it is expected and required that you are familiar with University guidelines on academic honesty. I have included links to relevant information below; it is your responsibility to familiarize yourself with this material.

UAlbany Graduate Requirements:  [http://www.albany.edu/graduatebulletin/requirements_degree.htm](http://www.albany.edu/graduatebulletin/requirements_degree.htm) (pay attention to section labelled ACADEMIC STANDARDS.)


Due to the intensive nature of this course, students are required to form study groups and to work together on assignments. Learn by interacting with one another — support and help one another.

However, each student should submit answers to the problem sets that are expressed in his or her own words. Submission of a “group” answer is not permitted; submission of group answers to satisfy an individual’s problem set assignment constitutes academic misconduct. Some assignments such as in-class or take-home exams and memos are to reflect only individual effort. For these assignments you are expected to neither give nor receive assistance from anyone.

As a policy for this course, plagiarism or cheating will result in a failing grade for the whole course.

In addition, I may pursue further disciplinary actions, including suspension and/or expulsion. For the purposes of this course, the following are taken as evidence of plagiarism or cheating:

- Material reproduced from another source without adequate citation.
- Identical answers being turned in by two or more students.
- Copying a computer file created by someone else (.xls, .mdl, .doc, etc) as a basis for an assignment that you claim as your own.
- A pattern of unusually similar answers being turned in by two or more students.
- Written answers or solutions that a student cannot logically explain verbally.
- Other evidence of collaboration between students on an in-class or take-home assignment that was intended to reflect individual effort.
Your work may be subject to computerized analysis to discover whether materials have been taken from on-line sources or to determine statistically whether answers are more similar than random chance would allow. Since this is such an important matter, if you have any questions about this course policy, you should ask me for any clarification that you may need.

**Use of cell phones, smart phones and laptops is permitted in class ONLY for educational purposes.**
You can use cell phones, smart phones, or laptops during class only for educational purposes, such as taking a note and using for in-class activities. If you carry a portable electronic device to class, please make sure that it is turned off or silent. If you need to make a phone call, text a message, check your e-mail, etc., please wait until the break. If you absolutely need to take a call during class (childcare, family emergency, etc.) please notify the instructor prior to class, and if you need to take a phone call, leave the class to do this so that you will not disturb others in the class.

If I see you using a phone or laptop in class for non-class purposes that have not been discussed previously with the instructor, you will be asked to leave the classroom for the remainder of the class period. Please see me if you have any questions about this policy.

**Disability statement:** Please see me at the beginning of the semester if you have a disability documented by the Office of Disabled Student Services (in the Department of Student Life) to request accommodations.

**Syllabus of topics**

The attached syllabus of topics shows the timing of the major topics in the class along with anticipated assignments. There are problem sets as well as readings and case studies that fit into this schedule. I have included my present best guesses of what you will need to prepare for each class and a more detailed assignment for each session will be available on Blackboard. All class materials are being posted to Blackboard, so stay tuned for updates from time to time.

** indicates optional readings that you should carefully consider if you are struggling with mathematical or technical concepts.

**List of Appendices**

**Appendix I:** Installing Microsoft Office 365
Appendix II: PAD 504 Problem Set Grading Rubric

Appendix III: Memo writing overview

Appendix IV: How to Write a Policy Memo: Tips and Tricks

Appendix V: Pointe Claire Individual Case I: Advice to Luz on Use of Models in the Planning Process

Appendix VI: Grading Rubric Pointe Claire Individual Assignment: Advice to Luz on Use of Models in the Planning Process

Appendix VII: Pointe Claire Group Memo and Presentation Assignment

Appendix VIII: Grading Rubric Pointe Claire Group Memo

Appendix IX: Grading Rubric Pointe Claire Group Presentation

Appendix X: Pointe Claire Individual Memo Assignment II

Appendix XI: Grading Rubric Pointe Claire Individual Assignment II

Appendix XII: Pointe Claire Group Memo and Presentation Assignment II

Appendix XIII: Grading Rubric Pointe Claire Group Memo II

Appendix XIV: Grading Rubric Pointe Claire Group Presentation II
Appendix I: Installing Microsoft Office 365

Downloading and Using Office 365 Software

**Background:** Microsoft Office Professional or later versions is required or auxiliary software for many of the core MPA courses. This includes programs such as Excel and Word. Computers in the school computer labs are loaded with the latest version of Office, Office 365. It is not required that you use Office 365, however, the program suite is available free of charge for students with a valid University at Albany email address. The license includes applications for both PC’s and MAC’s. More information about specific applications can be found on the University at Albany’s wiki page.\(^1\) If you need additional assistance please contact ITS online or by telephone.

ITS: [http://www.albany.edu/its/currentstudent.html](http://www.albany.edu/its/currentstudent.html) or (518) 442-4000

**Installation Instructions:** Log in to Outlook Web App (OWA) on your Windows 7, Windows 8 or Mac computer.

1. Click on the gear icon in the right corner.

2. Scroll down and select **Office 365 Settings**.

3. Click on **software**.

4. Click on **Install** to begin installing the latest version of Office on your computer.

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\(^1\)[https://wiki.albany.edu/display/public/askit/Office+365+ProPlus+Subscription+License+for+Students](https://wiki.albany.edu/display/public/askit/Office+365+ProPlus+Subscription+License+for+Students)
### Appendix II: PAD 504 Problem Set Grading Rubric

<table>
<thead>
<tr>
<th>Grade</th>
<th>Completeness</th>
<th>Correctness</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assignment is complete, all questions have been answered</td>
<td>Assignment is mostly correct, student demonstrates engagement and thoughtfulness about course material. If student is unable to technically complete a problem, a paragraph of explanation is included about why the student is stuck and speculates about what the next steps could be.</td>
<td>Student correctly integrates course software into problem set submission including but not limited to paste special. Grader is able to see formulas and clearly follow the students work.</td>
</tr>
<tr>
<td>0.85</td>
<td>Assignment may be mostly complete, missing one minor aspect</td>
<td>Assignment components completed may be mostly correct, student has demonstrated an effort to complete the assignment</td>
<td>Minor problems with format, slight difficulties following students work</td>
</tr>
<tr>
<td>0.65</td>
<td>Assignment is partially complete, missing one or more components of the assignment</td>
<td>Assignment has problems with correctness, substantial effort is not evident</td>
<td>Problems with the format, assignment instructions not followed. Grader has difficulty following students work.</td>
</tr>
<tr>
<td>0</td>
<td>Assignment was not turned in</td>
<td>Assignment was not turned in</td>
<td>Assignment was not turned in</td>
</tr>
</tbody>
</table>
Appendix III: Memo writing overview

TO: Students in Public Administration and Policy
FROM: Your Professional Communications Instructor
SUBJECT: The Look-and Feel of Decision Memos
DATE: January 25, 2010

Summary: Decision memos are a special form of professional writing. They should be readable in one minute or less, yet the reader can “drill down” into the text for more information. This is done by careful management of the layout of the page and the structure of the text. All main points should be summarized in a first paragraph, sometimes a paragraph like this one.

Being effective in the format of your professional communications is a key to making your point. Decision memos give summary advice to a busy decision maker with ample back up information in the text or appendices of the memo itself. Several key features of the visual look and feel of decision memos include:

A good memo can be scanned in one minute or less. Just read the subject line of this memo plus the bold paragraph headers. By scanning these five lines of text, you can get the overall feel for what this memo is all about. This scan took you less than thirty seconds. Getting your point across fast is key.

The reader can “drill down” for details. I can halt my eye on any paragraph that interests me and read just that paragraph for its detailed discussion. I have a visual index to the content of the memo and get additional information easily. Appendices can be used to store away really detailed facts, figures, and supporting arguments.

Use the page lay-out to make your points. In a well laid out memo, the clever use of bold paragraph heads, a summary paragraph, and where appropriate visually oriented tables and charts convey your message quickly and effectively.

Summarize all your main pints in the first paragraph. In traditional academic papers, it is customary to state your facts and assumptions up front and to argue carefully toward your conclusions. Conclusions then come at the end of this carefully reasoned paper. Decision memos turn this order on its head and present conclusions first with supporting detail to follow.

Attachments:
   (1) Summary Table that Proves My Point in Excruciating Detail
   (2) All That Pesky Data and Analysis That is Too Long to Present
Appendix IV: How to Write a Policy Memo: Tips and Tricks

Writing effective policy memos

What is a policy memo?
A policy memo is a document that provides analysis and/or recommendations for a particular audience regarding a particular situation or problem. A well-written policy memo reflects attention to purpose; it is well organized; and it has a clear, concise style.

Determining and responding to your audience
In most cases, you will know the audience for your work because (1) you have been hired by that individual or organization or (2) your instructor provides that information to you. Think carefully about the needs and expectations of your audience. For example, if your audience is an elected official seeking analysis on a highly technical matter, you should generally assume that the official lacks substantial technical expertise. You will need to define technical terms and provide enough background about the situation you are discussing that such a “lay” audience can grasp your arguments. On the other hand, if you are writing for a technically trained audience, you will waste time and energy providing background information that your readers already know.

Organizing an effective policy memo

Introduction
One distinguishing characteristic of a policy memo is that a summary of the document’s conclusion(s) and recommendation(s) is placed right at the beginning of the memo. Remember that the purpose of the document is generally to provide your audience advice about a particular decision, project, or policy stance. Thus, you open the memo by summarizing the problem or situation about which you are writing, and by providing a very brief summary of the conclusions/recommendations you have reached during your analysis. The rest of the memo is designed to support the conclusions or recommendations you present.

Background
Keeping in mind that different audiences need different amounts of background information (see above), follow your introduction with a concise summary of any historical or technical that your audience needs to understand the arguments you are building. (It may be that no background information is needed at all.)

Supporting arguments or analysis
Once you have set the stage for your audience, show how this information leads logically to the conclusions/recommendations you have provided.

Getting help
I strongly recommend that you exchange your memos with classmates for proofreading and suggestions for clarity. Learn from each other, and get used to the drafting process for clear and concise work.

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**Style and format**

Your ideas will be no more meaningful to the reader of your memo than you are able to make them. Meaning is not just embellished by style; rather, the two must function together. Muddled writing reflects hazy thinking. Your prose should be simple, clear, and easy to read; you will confuse, not impress, your readers with sophisticated vocabulary. Your reader should be able to describe your conclusions and the general arguments you used to reach them after only one reading of your memo.

Some tips on achieving an effective writing style:

1. Choose the simplest words available to express your ideas. When discussing technical information, avoid the use of jargon—or at least define your terms clearly.
2. Make your sentences “active”; avoid phrases such as “there are” or “it is.”
3. Use one paragraph to develop one idea or argument. Make that idea or argument explicit within the first one or two sentences of the paragraph.
4. PROOFREAD CAREFULLY. Don’t distract your readers from the content of your memo with poor spelling or grammar.

The format of the memo should be as follows:

1. Memos must be typed on 8.5 X 11” or A4 paper with margins of one inch on all sides.
2. Paragraphs should be single-spaced and should be separated by a double space.
3. You may use any standard conventions for the layout of your memo, including numbering, bullets, indentation, etc. Do address the memo to your audience at the top of the page. See the attached sample for a suggested layout.

**Length**

The length of your policy memo assignment will be announced in class. Do not exceed this length limit! I am enforcing this rule for several reasons:

1. I assume that you will continue to write persuasive documents for clients and/or colleagues in the future. Like you, most of these people are busy. They rarely have time to review lengthy documents; these generally wind up unread in a filing cabinet or waste basket. I’m hoping to help you craft documents that are concise and of use to your clients or colleagues.
2. Confining yourself to a particular page limit encourages careful editing, establishing priorities, and paring your arguments down. In general, these practices also improve the flow and impact of your writing.
3. Tightly written policy memos have a much better chance of influencing others toward a particular point of view.
Pointe Claire Individual Case #1: Advice to Luz on Use of Models in the Planning Process

Luz Sanscucci, your new boss at the Pointe Claire Regional Planning Commission, has just returned from the annual APPAM meetings where she heard a talk by Eugene Bardach on the use of formal models in the policy process. She was excited by his talk and immediately went out and bought a copy of his primer, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*. She is eager to follow up on many of his ideas and wants you to read his book and draft a policy memo giving her some advice on how the Commission might be able to use the formal simulation models that might emerge from its work with the Shared Vision Planning group at the US Army Corps of Engineers.

Luz has asked you to read Part I of Bardach’s book (pages 1 to 78) to get ready for this assignment. She gave you her copy of the book and you noticed at once that she had especially underlined and marked up the sections on Steps Four and Five (Selecting Criteria and Projecting Outcomes—pp. 31-63) and Appendix D: Strategic Advice on the Dynamics of Gathering Political support (pp. 159-165). You decide to especially look into those sections of Bardach’s book.

Luz is uncertain about what role formal models and mathematical analysis should play in community-based planning, especially when working with a politically divided Commission. She seeks your advice on how to proceed. She has several more specific questions:

1. How can she use models to communicate complexity to a varied set of stakeholders? Differing stakeholders hold different prior views of what is important and what they want to believe. How can a model be used to communicate insights in a complex policy environment when several views can all be partially correct, but that the whole story may be even more complex than any one of the initial stakeholder views?

2. Can she use the model to mediate possible conflicting points of view and help divergent stakeholders come to a common view of the public good? If so, how can a complex model help get to such a common agreement based on some shared vision of public value?

The second component of this assignment takes the form of a short (1-2 page) policy memo addressed to Luz Sansouci. This assignment is an individual assignment that challenges you to think broadly about the relationship between Data, Models, and Policy Choice in complex policy environments. You may work in a group structuring and developing your ideas, but the actual writing of this memo should reflect individual work.
Case Study Grading Rubric
Pointe Claire Individual Assignment

<table>
<thead>
<tr>
<th>Has a clear memo format, organization, and purpose/ conforms to recommended class memo style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main points of memo can be understood at a first reading, especially by reading paragraph headers</td>
</tr>
<tr>
<td>No grammar, spelling, or usage problems</td>
</tr>
<tr>
<td>Addresses how Liz should “roll out” the model to the “Commission.”</td>
</tr>
<tr>
<td>Addresses role of analysis to facilitate communication with the Commission.</td>
</tr>
<tr>
<td>Addresses how analysis can help to address conflict</td>
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</tbody>
</table>
Appendix VII: Pointe Claire Group Memo and Presentation Assignment I

Pointe Claire Group Case #1: Preliminary Analysis of Feasible Policy Packages for the Pointe Claire Region

You have just been hired by Luz Sansouci, Executive Director of the Pointe Claire Regional Planning Commission as her administrative assistant. Luz is currently in the process of responding to a Request For Proposals (RFP) from the Shared Vision Planning unit at the U.S. Army Corps of Engineers. Those communities who win the RFP will engage the Corps in a multi-year planning process connected to the Shared Vision Planning process and focused on problems and solutions posed by the winning local community.

Your assignment is to produce a 5 minute PowerPoint plus a short policy memo that can be used in preparing the RFP to the U.S. Army Corps of Engineers. The presentation and memo should address the following questions:

1. What, in your opinion, are the feasible policy packages that should be “on the table” during the planning process and hence mentioned in the RFP. You will probably want to sketch several “packages” of policy options, not just a single option or package of options. Each option should be generally described in qualitative terms, but you should also be specific about what types of measurements (financial or otherwise) might be used to help evaluate each bundle of policies.

2. Speculate on how other key stakeholders might react to the policy packages that you have put together. What in the various packages appeal to various stakeholders?

3. Indicate what is your preferred package as this process is getting started. Give reasoning for why you think this policy package is a good one. Also indicate how you might gather evidence to analyze or advocate for this option.

4. How should the analysis being proposed in the RFP deal with unknown scenarios? Specifically, how should Luz address the controversial issue of global climate change?

This assignment is designed to be a group product. Turn in one set of PowerPoint slides and a single memo for all members of your group. This memo should be a short (3 or fewer pages) policy memo.
### Case Study Grading Rubric
#### Pointe Claire Group Memo Assignment

<table>
<thead>
<tr>
<th>Criteria</th>
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<tbody>
<tr>
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<tr>
<td>No grammar, spelling, or usage problems</td>
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<td>What, in your opinion, are the feasible policy packages that should be “on the table” during the planning process and hence mentioned in the RFP. You will probably want to sketch several “packages” of policy options, not just a single option or package of options. Each option should be generally described in qualitative terms, but you should also be specific about what types of measurements (financial or otherwise) might be used to help evaluate each bundle of policies.</td>
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<td>Speculate on how other key stakeholders might react to the policy packages that you have put together. What in the various packages appeal to various stakeholders?</td>
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Appendix IX: Grading Rubric Pointe Claire Group Presentation

Case Study Grading Rubric
Pointe Claire Group Presentation Assignment

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<tr>
<th>Powerpoint slides have a clear format, organization, and purpose</th>
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<tbody>
<tr>
<td>Main points of presentation can be understood easily by audience by looking at information on slides</td>
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<td>Presentation is audible and not over five minutes</td>
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Appendix X: Pointe Claire Individual Memo Assignment II

Pointe Claire Individual Case #2: Updated Advice to Luz on Use of Models in the Policy Process

This individual assignment takes the form of a short (2-3 page) policy memo addressed to Luz Sansouci that provides her with specific advice on how to use the maps, models, and analyses that have been developed to support the public policy process in Pointe Claire. It updates advice that you may have given Luz in an earlier individual assignment. This assignment is an individual assignment that challenges you to think broadly about the relationship between Data, Models, and Policy Choice in complex policy environments. The purpose of this assignment is to address the several questions listed below. In order to do a good job on this assignment, you will want to reflect on and integrate things that you have been thinking about and reading about in other core classes in you MPA program.

Policy Challenges and Questions for this Assignment

1. How can Luz use the model to communicate complexity to a varied set of stakeholders? Differing stakeholders hold different prior views of what is important and what they want to believe. How can the model be used to communicate that in a complex policy environment it is surely possible that two divergent views of the truth exist, that several views can all be partially correct, but that the whole story may be even more complex that any one of the initial stakeholder views.

2. Can she use the model to mediate possible conflicting points of view and help divergent stakeholders come to a common view of the public good? Is there a common view of what is ultimately “best” for Pointe Claire that most or many of the stakeholders can agree on? Can a complex model help get to such a common agreement based on some shared vision of public value? Can a complex model help to avoid conflict and build a policy consensus?

3. Should Luz “roll out” the model in all its complexity to all members of the Commission? To the Public? If so, how should she do this? How much of the technical work that went into the model does she need to reveal to whom and when? What process should she use to manage the release of the model and its results to various stakeholder groups?

Using Complex Analysis to Lead for Policy Change, To Lead for the Public Good

Ultimately Luz Sansouci’s job is not to simply arrive at a best technical solution to a complicated problem. As a leader in the public sector, her job can be seen as providing leadership for the “public good”, finding ways to promote public value in her community. Fung (2003) envisions these functions in terms of designing “minipublics” that vary along dimensions of the character of participation and deliberation, how information is pooled to channel and change citizens’ minds, how notions of popular accountability and control interact with capacity of the state, and finally the political effects of policy changes and proposals. According to Fung, Luz needs to figure out how to use these model-based analyses and insights to help her better to design her minipublics that will make Pointe Claire a safer community in the long run.

Eden and Ackermann (1998), taking a point of view similar to Fung, view the development of public strategies as gaining alignment and consensus between and among major stakeholder groups in the public arena as the key task of the leader in a public policy setting. They explicitly view complex computer-based models and the group sessions that are used to create and understand these models as opportunities to expose points of conflict between various stakeholders and to build toward a consensus view of a problem that has the potential to transcend parochial points of view of any given stakeholder group. By

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3 This case and other Pointe Claire case material, maps, and models have been developed by Michael Deegan—US Army Corps of Engineers, Rod MacDonald—Initiative for System Dynamics in the Public Sector, Rockefeller College, and Minyoung Ku, Jennie Law and David Andersen—Instructors in RPAD 504 Data Models and Decisions I, Rockefeller College, University at Albany.
involving all key stakeholder groups in the modeling process Eden and Ackerman view complex models as a way to gain agreement about a strategy for moving forward in the face of complexity.

Senge (2006) argues along a similar line that the work of leaders in the 21st century is to build alignment among members of a strategy team through a process of shared vision and team learning that is capable of creating “learning organizations”. In Senge’s view, creating whole system views such as the maps and models that have been developed for Pointe Claire is the key to aligning mental models and coming to a shared vision of how to move forward for the public good. Senge would be interested in having Luz gain alignment on the Commission by using her system maps and models to create and then promote a whole system view of the problems and issues facing the Pointe Claire Community. All of these scholars are concerned with the questions and challenges above that face Luz as a public leader.

Your individual assignment for this second component of this case assignment is to craft a short (2-3 pages) executive memo addressed to Luz Sansouci advising her on how to use the maps and models that have been created to lead for the public good in Pointe Claire community. Luz is seeking specific suggestions for how to link that technical model-based analysis that the Commission has done to a more complete public policy process. In answering the questions above, what specific recommendations would you give her (1) for “rolling out the model”, (2) for using the model, maps, and other technical analyses to communicate how complex and inter-related are the policy choices in Pointe Claire, (3) and using the model and other technical analyses to mediate conflict and arrive at policy outcomes that to the extent possible are guided by a genuine view of the public good, not just special interest positions.

This is an assignment that seeks to summarize much of what is important to this class on Data Models an Decisions and challenges you to think through specifically how models, especially complex policy-oriented models should best connect to the public policy process. The readings cited in this case study are also assigned readings in other core classes in your MPA program—this assignment is pushing you to think across categories of our MPA core curriculum

Good Luck!!

References:


## Appendix XI: Grading Rubric Pointe Claire Individual Memo II

### Case Study Grading Rubric

**Pointe Claire Individual Assignment II**

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Appendix XII: Pointe Claire Group Memo and Presentation Assignment II

Pointe Claire Group Case #2: Final Analysis of Policy Packages for the Pointe Claire Region

This assignment takes the form of a policy memo and a five minute slide presentation to be given to Luz Sansouci plus other members of the Commission as a follow-up to your first Pointe Claire Group Case assignment. This assignment is a group assignment and should be completed by your study group. The purpose of this assignment is to craft a solid piece of model-based policy analysis using the tools you have learned about in this class. Use Bardach’s eightfold path as a frame for organizing your approach to this assignment. You can assume that step one, defining the problem, and step two, assembling some evidence have already taken place in the activities that have led up to the creation of the CoastalProtectSIM. A brief narrative below discusses some of the activities that have taken place within the case since you wrote your first case assignment.

Using the CoastalProtectSIM model, your group should address the following questions:

1. First, assume that the steps leading up to the creation of the CoastalProtectSIM model are based on best current evidence and provide a useful definition of the problem facing the Commission.
2. Construct and describe a feasible set of alternatives to be considered by the Commission.
3. Articulate one or more sets of criteria that can be used to evaluate the alternatives. These criteria may be sensitive to differing stakeholder perspectives in the case.
4. Use various analytic tools that you have studied in class to project the outcomes of the alternatives that you present.
5. Making trade-offs in this case will be complicated because of the complexity of stakeholder dynamics within the Commission. As you confront trade-offs, you will need to keep in mind various stakeholder positions as well as the need to gather political support for your proposed actions.
6. Your presentation should arrive at a clear set of proposals and lay out the process that you used to decide.
7. Your presentation and memo should clearly and succinctly tell the story behind and within your analysis.

Questions to Address & Tasks to Undertake in this Assignment

How does this case relate to what we have been doing in Class?

Part I of this case opened with Luz Sansouci facing a number of leadership challenges that arise from her role at the Pointe Claire Regional Coastal Planning Commission. As a newly minted MPA from the Rockefeller College hired by Luz to support her work, your first assignment was to provide her with advice on how best to use (or not to use) analysis to support the Commission’s policy deliberations. Since then, we have completed quite a bit of technical work related to the Pointe Claire Case:

1. We have looked at the Pointe Claire situation using formal decision analysis and decision trees as analytic tools.
2. We have computed the value of both perfect and imperfect information for simple storms and for global warming based on the simplified decision tree in the case.
3. We learned a bit about Group Model Building as a way to create system dynamics maps of possible causal forces driving policy decisions in the Pointe Claire Region.
4. We worked as a class in the computer lab and in homework assignments to learn more about the CoastalProtectSIM model.

4 This case and other Pointe Claire case material, maps, and models have been developed by Michael Deegan—US Army Corps of Engineers, Rod MacDonald—Initiative for System Dynamics in the Public Sector, Rockefeller College, and Minyoung Ku, Jennie Law and David Andersen—Instructors in RPAD 504 Data Models and Decisions I, Rockefeller College, University at Albany.
This technical work now sets us up to readdress the basic issues in the Pointe Claire case from a more technically sophisticated point of view. *We can seek better to understand how mathematical models can help to support decision making complex situations in the public sector.*

**What Has Been Happening in Pointe Claire since Part I of the Case?**

While we were busy learning about decision trees, difference equations, system dynamics and other technical topics, Luz and the members of her Commission have been hard at work. Here is what Luz and her Commission have done (H-m-m-m, looks a lot like what we have been doing®):

- They have hired a professional team of consultants who have led them through a formal group model building session with attention being paid to details of how to get data for the model and how to correctly formulate and parameterize the model.
- The professional team worked between the first and second weekend sessions to create a formal running simulation model. They presented this model to Luz and her Commission at the second weekend session.
- Based on feedback that the modeling team got from team members at the second weekend session, the modeling team updated and refined the running simulation model. The current version of the simulation model has been configured to be able to test the following set of policy options:
  1. Structural mitigation projects in the form of barriers, sea walls, and dyke systems
  2. Implementing building codes for more storm resistant construction
  3. Buying out or relocating flood victims
  4. Zoning regulations to prevent development in flood-prone areas
  5. Beach Nourishment Projects to restore the environment and protect people

- The simulation model is set up so that there will be two storms—one in 2017 and again 25 years later in 2042. In the base run these two storms are mathematically identical. Of course, such a situation would never occur, but this useful fiction has the effect of showing the impact of development and loss of natural protection during the simulated 25 year period. For some runs, you may wish to have the second storm be somewhat stronger due to global climate change. There are several scenario settings in the model that allows users to set their assumptions about global warming.
  - The “Seal Level Rise Switch” allows the user to turn on or turn off global warming in the model
  - The “Sea level Rise by 2052” allows the user to specify how much the sea level will rise between 2012 and 2052.
  - The “Sea Level Rise Multiplier from Storm Intensity” allows the user to make assumptions about greater surges above simple sea level rise. A multiplier of 1.0 implies no extra surges, whereas a multiplier of 1.5 assumes that surges will be 50% higher above normal sea level (including global warming)

To complete this part of the assignment, you will need to run and re-run the simulation model many times and arrive at a “policy package” that you would propose based on what you find from running the simulation model. For the purposes of this exercise, you should assume the CoastalProtectSIM represents the best available consensus model available to the Commission. You initial job is not so much to critique the model as to advocate for a policy position based on runs that come from the model. You may choose to use multi-attribute utility analysis or explicit objective functions (topics that we will be covering soon in this class) to support your analysis. You may wish to identify key sensitive assumptions and parameters in the model and discuss the implications of varying them on the policy package that your propose. For example, your final recommendations may be sensitive the assumed rise in global temperature or sea level by 2052 or some other assumptions made within the model. When and if you find key assumptions that make a key difference in the technical results that you are presenting, explain how your final recommendations take into account these (often unknown) assumptions. If your analysis finds specific ways that the CoastalProtectSIM model can be improved, you can indicate (perhaps in an appendix to your memo) how this might be done. This is a challenging technical assignment that requires that you and your group come to grips with many analytic and technical complexities both in the Pointe Claire region and its politics, but also in the formal model of these complex issues.

*This assignment is designed to be a group product. Turn in one set of PowerPoint slides and a single memo for all members of your group. This memo should be a short (3 or fewer pages) policy memo.*
## Case Study Grading Rubric
### Pointe Claire Group Memo Assignment II

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## Case Study Grading Rubric
**Pointe Claire Group Presentation II**

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