

SYLLABUS

IND 439: Leadership and Management for Scientists (1 credit) Spring 2023

Thursdays: 2:00 pm - 3:40 pm

See schedule page 4 & 5 for class location

Prerequisites: None

Credit: 1

Course Director-

Eric Vaughn, M.Ed.

Email: Eric Vaughn@urmc.rochester.edu

Office: G-9552

Course Description

This course focuses on human-centered strategies for leading effective teams in biomedical and health science academic environments that can also be translated into research-related careers. Through a series of interactive activities, reflective writing, self-assessment instruments, and group discussions, you will develop a repertoire of techniques for addressing issues that commonly arise within and between research groups.

The program promotes awareness of the participants' own styles of leadership and offers them new approaches to explore. Since leadership styles are highly individual and situational, the instructors do not judge styles as "good" or "bad," but provide a nonjudgmental yet structured environment in which you can discover what works for you.

This program is highly experiential, discovery based, and full of mutual "air time" for all to share ideas and insights. We use short videos, case examples, group work, short lectures, and lots of dialog to investigate the topics below.

Course Aims and Objectives

By the end of this course, students should be able to:

- Recognize the benefits of a diverse, inclusive and welcoming environment through the use of conflict management and emotional intelligence techniques.
- Explain how the knowledge of personality styles can affect the workplace and optimize team performance.
- Evaluate the impact of organizational change and apply techniques to neutralize resistance and obtain buy-in during periods of change.
- Develop an understanding of strategic and project management techniques to complete long- and short-term goals.
- Practice being an active mentee and mentor to create opportunities for themselves and others and explain how an entrepreneurial mindset can enhance success.
- Effectively communicate professional needs and project goals to various audiences in an engaging manner.
- Understand how to best manage themselves to succeed in professional development, attain goals, and create their own work/life balance.
- Apply informational interviewing skills to become better communicators and networkers.

Course Policies and Expectations

Each student will be required to attend a majority of all classes. Because this course is a workshop-based course, class participation and assignments will make up the majority of the student's grade. Students will be expected to come with an open mind and the understanding that they will be outside their comfort zone at times. The goal is to keep everyone engaged and interacting throughout the entire course; an active class will enhance understanding and improve perspective!

Assignments and Grading Procedures

This course is Pass/Fail.

Attendance/Participation: Due to the nature of the course, participation will be necessary and is encouraged. Students may only miss up to **three** class presentations with instructor knowledge to earn a passing grade.

Readings: Students will be required to read various articles and complete exercises on their own this semester. These will be used to fuel in-class discussions in order to enhance our discourse throughout the semester.

Assignments: Throughout the course visiting instructors will be assigning various exercises to supplement in-class discussion. In order to qualify for a grade of "Passing" students must complete the individual project, group project and eight of the thirteen assignments. Individuals taking the course for credit or audit must complete assignments 1, 2 and 5. Students taking the course for credit must also complete at least two-pairs of self <u>and</u> peer assessments (3 & 4, 6 & 7, 8 & 9, 10 & 11). Example: If you complete self-assessment assignment 3, you will then reflect a student's assignment 4 to get credit. All

students taking the class for course credits, must complete a total of 8 of the 13 assignments. In addition to assignments, trainees must complete a Black Board evaluation of 11 of the 14 in-person sessions. Assignments are noted with an asterisk (*) and should be submitted online using Blackboard Assignment Submission. Due dates and additional assignment details can also be found on Blackboard.

Academic Integrity

Academic integrity is a core value of the University of Rochester. Students who violate the University of Rochester University Policy on Academic Honesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since academic dishonesty harms the individual, other students, and the integrity of the University, policies on academic dishonesty are strictly enforced. For further information on the University of Rochester Policy on Academic Honesty, please visit the following website:

https://www.rochester.edu/college/honesty/

Accommodations for students with disabilities

Students needing academic adjustments or accommodations because of a documented disability must contact the Disability Resource Coordinator for the school in which they are enrolled (see link below for contact information).

http://www.rochester.edu/eoc/DisabilityCoordinators.html

Projects: Individual & Group

<u>Individual Project:</u> The first individual project requires you to create a flowchart for six informational interviews, to compile notes from two informational interviews (no more than one piece of paper per interview), and develop one reflection piece (500 -1000 words) on how the interviews will help you to make choices regarding professional development activities, internships or jobs. (Submit to Black Board by 2:00 pm Thursday, March 16th.)

Group Project:

Completion of this project is required to pass. You will be assigned to a group of four or five individuals. Using the knowledge that you have gained so far in this course and your personal experience, develop a group chart (one chart per group, any format is acceptable) that shows similarities and differences among the group members signature themes. Define each of your personal themes and include that with the chart. For those who share similar themes outline how each participate defines or describes that theme. What similarities or differences do individuals You can answer these questions either through the chart or through a written report. If the group needed to work together, how would we help each other achieve the goal set to accomplish? What would each member of the group be best at, how would you best collaborate? How would each of you approach things differently? How would knowing each other's talents and strengths help us have a better relationship? How could this benefit your work as research trainees if

you utilized Clifton StrengthsFinder in your work and research. (Submit by 2:00 pm Thursday, April 20, 2023)

<u>Auditing Students:</u> You will be required to attend and provide evaluations for **eight of the fourteen** sessions, and complete the **individual project and three assignments** of your choice.

2023 Course Schedule Topics and Presenter Information

Week	<u>Date</u>	Location	<u>Topic</u>	Presenter(s)
<u>#</u>				
Week 1	January 12, 2023	G-8534 Anderson Room (URMC)	Building Your Support Network	Eric Vaughn, M.Ed.
Week 2	January 19, 2023		Project Day	
Week 3	January 26, 2023	CEL Classroom 2- 7534 (URMC)	Effective Communication	Natalie Lundsteen, Ph.D.
Week 4	February 2, 2023	Natapow Conference Room (1-9545) (URMC)	Managing People	Steve Dewhurst, Ph.D.
Week 5	February 9, 2023	G-8534 Anderson Room (URMC)	Understanding Your Strengths Part 1/Strengths Finder	David Cota- Buckout, M.Ed.
Week 6	February 16, 2023	G-8534 Anderson Room (URMC)	Understanding Your Strengths Part 2/Strengths Finder	David Cota- Buckout, M.Ed.
Week 7	February 23, 2023	CEL Classroom 2- 7544 (URMC)	Conflict and Communication	Gwen Olton, M.A.
Week 8	March 2, 2023	G-8534 Anderson Room (URMC)	Strategic Planning	Katy Stevenson, MPP
Week 9	March 9, 2023	G-8534 Anderson Room (URMC)	Cultural Humility	Kristin Hocker, Ed.D.
Week 10	March 16, 2023	CEL Classroom 2-7536 (URMC)	Managing Resources – Week 1	Jane Tolbert, Ph.D.
Week 11	March 23, 2023	LeChase Assembly Room (G-9657)	Managing Resources – Week 2	Jane Tolbert, Ph.D.
Week 12	March 30, 2023	LeChase Assembly Room (G-9657)	Project Day	

Week	April 6, 2023	G-8534	Hiring/Selecting	AnnaLynn
13		Anderson Room	Teams & Leadership	Williams, Ph.D.
		(URMC)	Development	& Nathan Smith,
				Ph.D.
Week	April 13,	G-8534	Project Management	David Topham,
14	2023	Anderson Room		Ph.D.
		(URMC)		
Week	April 20,	G-8534	Negotiating	Alissa Clark, M.S.
15	2023	Anderson Room		
		(URMC)		
Week	April 27,	G-9576	Time Management	Antentor "A.J."
16	2023	LeChase		Hinton Jr., Ph.D.
		Assembly(URMC)		

Course Presentations/Weekly Overviews	Readings/Assignments/Due Dates
Week 1: Thursday, January 12, 2023 (2:00 pm-3:40 pm)	Assignments before session on January 12, 2023 None
<u>Presenter</u> : Eric Vaughn, M.Ed.	Assignments post session:
Location: See page 4	(*) Assignment 1: Mentor Network Map: Please fill out at least each "1" in the mentor map based on the discussion we had in class. (Due Time & Date: 2:00 pm on Thursday, January 19, 2023)
 Session Title: Building Your Support Network Session Goals for "Building Your Support Network": When to start developing your network? Why a network is important to your academic and career journeys? How to establish networking connections in 	Individual Project One: Please see Individual Project instructions on page 3. Create flowchart for 4 informational interviews and provide notes on two of the interviews. Reflection piece (500 -1000 words) on how the interviews will help you to make choices regarding professional_development activities, internships, jobs, etc. The final Submission should include the following information within one document:
today's fast and ever changing world? Example: U of R, conferences, Social Media (LinkedIn), other	Flowchart for four informational interviews
methodsHow to maintain network connections throughout your career and life?	 Compiled notes from two informational interviews (no more than one piece of paper per interview) One reflection piece (500 -1000 words) on how the interviews will help you to make choices regarding professional development activities, internships, jobs, etc.
Handouts Provided on Blackboard: • Mentor Network Map • Cold Emails Hot Coffee PowerPoint	(Due Time & Date: 2:00 pm on Thursday, March 16, 2023) (*) Assignment 5: Complete Top 5 CliftonStrengths Talent Assessment ((Submit on Black Board by 2:00 pm on Wednesday, January 25, 2023)
	Vaughn Black Board Evaluation (Due by 2:00 pm on January 19, 2023)
Week 2: Thursday, January 19, 2023 (2:00 pm-3:40 pm)	
Presenter: None	
Location: See page 4	
Session Title: Individual Project Work Day	
Week 3: Thursday, January 26, 2023 (2:00 pm-3:40 pm)	Assignments before session on January 26, 2023 Readings- Available on Blackboard-
Presenter: Natalie Lundsteen, Ph.D.	• Your Communication Skills Matter for Everyone Job – Here's How to Use, Improve, and Show Off Yours
Location: See page 4	 <u>How to Write Professional Emails That Get the Results You Want</u> <u>How to Make Your Voice Heard in the Workplace (Especially as a Woman or Minority)</u>
Session Title: Effective Communication	

Navigating workplace communication, especially in a new setting, can be challenging. This session teaches effective communication and interaction strategies for working with colleagues and teams. We will cover various modes of communication, and learn how to address some of the most common workplace communication challenges, including understanding email etiquette, giving and receiving feedback, and conducting difficult conversations. Week 4: Thursday, February 2, 2023 (2:00 pm-3:40 pm)	Assignments post session: (*) Assignment 2 (required): Take the somewhat long survey at https://www.16personalities.com/free-personality-test . Print out and prepare to discuss some aspects in class. (Upload results from personality test on Black Board by 2:00 pm on Monday, January 30, 2023.) Lundsteen Black Board Evaluation (Due by 2:00 pm on Thursday, February 2, 2023) Assignments before session:
Presenter: Steve Dewhurst, Ph.D. Location: See page 4 Session Title: Managing People Dr. Steve Dewhurst will introduce key concepts relevant to managing people, including a foundational self-reflection to understand your own personality traits and decision-making style. He will highlight effective approaches to time management, delegation of responsibilities, and interpersonal communication. Handouts Provided on Blackboard	Assignments post session: (*) Assignment 3 (200-300 words): Define your decision-making style and personality traits as they relate to management and leadership. Outline the kind of boss you wish to be and why. (Submit on Black Board by 2:00 pm on February 9, 2023) (*) Assignment 4- Response Submission: (200-300 words): Reflecting on the decision-making style and personality traits as they relate to management and leadership from the response, how could you utilize your decision-making style and personality traits to work collaboratively with the other individual? Advantages? Possible areas that may need to be addressed? (Submit on Black Board by 2:00 pm on February 16, 2023) Dewhurst BB Evaluation (Submit on Black Board by 2:00 pm on February 9, 2023)
Managing People Exercises Week 5: Thursday, February 9, 2023 (2:00 pm-3:40 pm) Presenters: David Cota-Buckout Eric Vaughn, M.Ed.	Assignments before session: Pre-Class Readings Read:
Location: See page 4 Session Title: Overview of CliftonStrengths & Understanding Your Top 5 Strengths David Cota-Buckout and Eric Vaughn will focus week one providing a brief history of CliftonStrengths, overview of the 34 strength themes, identifying and defining your top 5 strengths and how you currently utilize your strengths in your academic and professional life.	 Using CliftonStrengths to Make Measurable Life Changes To. Unleash People's Strengths, Help Them Manage Weaknesses Soft Skills? How CliftonStrengths Is a Research-Based Tool Assignments post session: No post assignment Cota-Buckout BB Evaluation Week (Please evaluate both weeks) (Submit on Black Board by 2:00 pm on February 16, 2023)
Week 6: Thursday, February 16, 2023 (2:00 pm-3:40 pm)	Assignments before session:

	Pre-Class Readings
Presenters: David Cota-Buckout	
Eric Vaughn, M.Ed.	What Leaders Can Do Right Now to Optimize Worker Potential
Location: See page 4	• The No. 1 Strategy for True Inclusion in the Workplace
Location. See page 4	 <u>How to encourage Differing Opinions, Not Conformity</u>
Session Title: Putting Your Strengths to Work David Cota-Buckout and Eric Vaughn will assist you in putting what you learned during week one on CliftonStrengths in interactive small group activities to demonstrate how you may/use your strengths in your day-to- day interactions and how understanding strengths can bring those we work with closer together.	Assignments post session: (*) Assignment 6: (200-300 words): Create a personal definition for one of your 5 top strengths. Reflect on your personal definition and what does it mean to you. How will you utilize CliftonStengths into your work and professional career moving forward to accomplish your goals and tasks as a leader in your area of work? (Submit on Black Board by 2:00 pm on February 23, 2023)
	(*) <u>Assignment 7: Response (200-300 words):</u> Reflecting on the strength provided through the individuals self-assessment response, what is your personal definition of the strength the individual identified. How do the definitions compare or contrast. How would this individuals top strength complement with your top strengths? (Submit on Black Board by 2:00 pm on March 2, 2023)
	Buckout BB Evaluation Week (Please evaluate both weeks) (Submit on Black Board by 2:00 pm on February 23, 2023)
Week 7: Thursday, February 23, 2023 (2:00 pm-3:40 pm)	Readings to review before session on February 23, 2023- (Available on Black Board)
Presenter: Gwen Olton	Select readings from <i>Conflict to Community</i> written by Gwen Olton
Location: See page 4	Assignments post session: No Assignment
Session Title: Conflict and Communication In this introductory session, participants will explore definitions of conflict and some simple models for	
approaching conflict resolution and transformation. Using	Olton BB Evaluation (Submit on Black Board by 2:00 pm on March 2, 2023)
real-life scenarios, participants will have an opportunity to	
reflect on their current strategies for working through conflict as well as begin to add new skills for working through tough	
situations. With a special focus on communication, this	
session will support folks in building tools to talk through a	
variety of situations leading up to, and including, conflict with	
others. Week 8: Thursday, March 2, 2023 (2:00 pm-3:40 pm)	Readings to review before session on March 2, 2023- (Available on Black Board):
Presenter: Katy Stevenson	A Proposed Technique to Enhance Strategic Plan Implementation Using Continuous Quality Improvement Methodologies
Location: See page 4	A Systematic Strategic Planning Process Focused on Improved Community Engagement by an Academic Health Center: The University of Kansas Medical Center's Story
Session Title: Strategic Planning	Assignments post session:
II - 1 - 1 - 1 / C /2022	assignments post sessione

Katy Stevenson will discuss the four major stages of strategic planning and how to apply them to your and your team's professional growth and success. These four stages can be applied in a variety of settings throughout one's career. She will also provide examples of strategic planning processes in medical schools and key personnel and resources to connect with.	(*) Assignment 8: (200-300 words) Present how you will incorporate strategic planning into your current and future work as a scientist. How have you utilized strategic planning previously to this session and what new take a ways and methods will you implement moving forward and why? What is one major take away you took from today's session. (Submit on Black Board by 2:00 pm on March 9, 2023) (*) Assignment 9: Response Submission: (100-300 words) If you were a part of this individual's team, how would the proposed strategic planning method assist you and the other team members? What are the benefits? Anything that should be considered? (Submit on Black Board by 2:00 pm on March 16, 2023) Stevenson BB Evaluation (Submit on Black Board by 2:00 pm on March 9, 2023)
Week 9: Thursday, March 9, 2023 (2:00 pm-3:40 pm)	Assignments before session on March 9, 2022- (Available on Black Board) Read:
Presenter: Kristin Hocker, Ed.D.	 Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in
Location: See page 4	multicultural education
Location. See page 4	Cultural humility: Essential foundation for clinical researchers
Session Title: Cultural Humility Dr. Kristin Hocker will define Cultural Humility, a philosophy that empowers individuals to effectively engage in interpersonal relationships that are dynamically diverse and mutually respectful. She will introduce a framework for individuals to increase their understanding of the significant funds of knowledge that exists within each person's cultural background and identity.	Assignments post session: (*) Assignment 10: (200-300 words) — Present ways that adopting the philosophy of cultural humility can impact your work and those you encounter in your work (Submit on Black Board by 2:00 pm on March 16, 2023) (*) Assignment 11: Response Submission: (100-300 words) — How could the proposed adoption of cultural humility proposed by the individual you are responding impact the individuals within the department, program, and group? (Submit on Black Board by 2:00 pm on March 23, 2023) Hocker Black Board Evaluation (Submit on Black Board by 2:00 pm on March 16, 2023)
Week 10: Thursday, March 16, 2023 (2:00 pm-3:40 pm)	
Presenter: No presenter	
Location: See page 4	
Session Title: Project Work Week	
Week 11: Thursday, March 23, 2023 (2:00 pm-3:40 pm)	Assignments before session: Read
<u>Presenter</u> : Jane Tolbert, Ph.D.	(1) Preparing and Managing Your First Lab Budget: Finance 101 for New Investigators (2) Proposal Preparation and Submission: Budget Basics
Location: See page 4	
Session Title: Managing Resources- Part 1	Assignments post session: No assignments due for next session.
Dr. Jane Tolbert will introduce the basics of budgeting and	
financial management for research projects. General budget	Tolbert BB Evaluation Week (Please evaluate both weeks) (Complete on Black Board by 2:00 pm on March 30, 2023)

categories and budget creation will be reviewed. Tools for resource and financial management will be discussed.	
Week 12: Thursday, March 30, 2023 (2:00 pm-3:40 pm) Presenter: Jane Tolbert, Ph.D. Location: See page 4 Session Title: Managing Resources- Part 2 Dr. Jane Tolbert will introduce the basics of budgeting and financial management for research projects. General budget categories and budget creation will be reviewed. Tools for resource and financial management will be discussed.	Assignments before session: None Assignments post session: (*) Assignment 12: Develop a brief financial plan for a grant submission or lab start up, please utilize lesson materials from Part 1 and Part 2, two-page max. Include rational of requests within the financial plan. (Submit on Black Board by 2:00 pm on April 6, 2023) Tolbert BB Evaluation Week (Please evaluate both weeks) (Complete on Black Board by 2:00 pm on April 6, 2023)
Week 13: Thursday, April 6, 2023 (2:00 pm-3:40 pm) Presenter: AnnaLynne Williams, Ph.D. & Nathan Smith, Ph.D.	Assignments before session: Read: • Academic Leadership: Gatekeeping or Groundskeeping? • Ten Simple Rules to becoming a principal investigator
Location: See page 4 Session Title: Selecting/Hiring Teams & Leadership Development Drs. AnnaLynn Williams and Nathan Smith will elaborate and provide personal experiences in hiring and selecting the teams. Today's science requires not only strong individual effort, but also active cooperation among the members of a research team for a final product to emerge. It is critical for every member of the organization to understand the concept of teamwork and to consider their job as part of a team effort. Lecture, group discussion and activities (role playing), will provide trainees with experience in understanding how to lay the groundwork in recruiting, hiring, and onboarding team members to be successful members of the greater institutional, division, department, and research group. This session will also intertwine and discuss the importance of individual and team leadership in this process.	Assignments post session: • None Williams & Smith BB Evaluation. (Complete on Black Board by 2:00 pm on April 13, 2023)

Updated 1/6/2023

Week 14: Thursday, April 13, 2023 (2:00 pm-3:40 pm) Assignments before session: Read Presenter: David Topham, Ph.D. Strategy and Project Management in the Academic Setting Project Management Overview Location: See page 4 Common Mistakes in Managina Academic Research Projects Session Title: Project Management **Assignments post session:** Dr. David Topham will provide an overview of professional (*) Assignment 13: Design a flowchart for an individual project, such as a qualifying exam or manuscript preparation, or project management as applied in clinical and basic academic for a group project, such as completion of an aim from one of your PI's grants. Incorporate concepts of project planning, research settings. While pervasive in the business and private setting timelines, milestones, and deliverables, project tracking and measuring progress. .(Complete on Black Board by sector settings, formal project management is not often 2:00 pm on April 20, 2023) employed in typical academic research settings. The group will discuss three concepts of project planning, setting Topham BB Evaluation .(Complete on Black Board by 2:00 pm on April 20, 2023) timelines, milestones, and deliverables, project tracking and measuring progress in a research setting. Week 15: Thursday, April 20, 2023 (2:00 pm-3:40 pm) Assignments before session: None Presenter: Alissa Clark, M.S. **Assignments post session:** No post session Assignment Location: See page 4 Clark BB Evaluation (Complete on Black Board by 2:00 pm on April 27, 2023) Session Title: Negotiating Instructor Alissa Clark will discuss the topic of negotiating, which will be used to obtain terms or agreement of items you Group Project Due (Complete on Black Board by 2:00 pm on April 27, 2023) desire or may need throughout your professional career/life. This session will provide you with things to consider and do before the negotiation process, components to negotiating, criteria to consider, how to start the conversation of negotiation, working with your mentors to better prepare for negotiations, and much more. Week 16: Thursday, April 27, 2023 (2:00 pm-3:40 pm) Assignments before session: Time management for STEMM students during the continuing pandemic - PubMed (nih.gov) Presenter: Antentor "A.J." Hinton, Jr., Ph.D. Creating a positive feedback loop in leadership to accelerate cultural change - PubMed (nih.gov) Location: See page 4 Article

Session Title: Time Management

It is thought by many that one of the biggest obstacles to success is the lack of practical time management skills

during the Science Technology Engineering Mathematics Medicine (STEMM) journey. It is necessary to set clear goals and then use your time effectively to achieve those goals to manage time and realize one's dreams successfully.

Updated 1/6/2023

Hinton Black Board Evaluation (Submit on Black Board by 2:00 pm on Tuesday, May 2, 2023)

Overall Course BB Evaluation (Complete on Black Board by 2:00 pm on Tuesday, May 2, 2023)

With the adage that you can decide more effectively what to	
do today if you know where you want to be tomorrow, here	
we follow with a discussion on decision-making processes to	
help students organize and effectively structure their time as	
a critical element in the overall organization of their life	
during leadership opportunities. This seminar provides	
methods, resources, tips, and successful time-use strategies	
for climbing the academic ladder to career attainment and	
advancement during STEMM journey. Notably, in this	
seminar, we will use various types of time management	
experiences to offer advice on how to increase time	
management through mentoring and leadership, to help	
students use their time to obtain a successful and well-	
balanced life during their academic career.	

Updated 1/6/2023