



Leadership in a Dynamic Environment

CASNS 329 LDE (3 credits)

Course Catalog Description

What can be done about climate change? Who can make a difference? Smart climate science and policy need appropriate leadership to make positive change happen. This course teaches you to be an effective leader while expecting you to leverage the individual strengths of your group and your crew when you take on the responsibility of a Junior Watch Officer at sea.

During the next six weeks in Woods Hole, we explore leadership theory, analyze multiple real-world examples, and synthesize perspectives from case studies to understand how leadership decisions affect outcomes.

As part of this process, you work to develop emotional intelligence while learning the strategies and habits of successful, effective leaders. We look at dynamic environments and the challenges they produce. We also apply the lens of course theory to interpret the significance of decisions made by exceptional leaders of all backgrounds, colors, and creeds.

In the last six weeks of this program, you participate as active members of the ship's crew, progressing through increasing levels of responsibility aboard the *SSV Robert C Seamans*. This course culminates in a final mission in which you, as the student crew, take on the responsibility of vessel operations.

You are in 15 lecture/discussion sessions during the shore component, followed by over 160 hours of watch-standing and progress assessments throughout a 32-day training cruise at sea.

Instructor: SEA Faculty

Location: Woods Hole, MA, and on board *SSV Robert C. Seamans*

Learning Outcomes:

1. Analyze personal strengths and opportunities for improvement; use self-assessments to develop leadership style and respond effectively in dynamic scenarios.
2. Understand and interpret human behavior, as well as signs of the biological stress response, in self and others for a range of individuals, communities, cultures, and styles.
3. Initiate, guide, and participate effectively in collaborative settings and discussions - one-on-one, in groups, or Captain-led - with a variety of thought partners on topics, texts, and issues, building on others' ideas and expressing their ideas clearly and persuasively. 2
4. Synthesize information from diverse sources and formats to present findings as a coherent understanding of a concept or phenomenon, resolving unclear or conflicting information where possible.
5. Follow complex, multistep processes when carrying out responsibilities on the ship; show attention to detail and situational awareness in class and at sea.
6. Demonstrate practical leadership in the underway dynamic environment including decision-making and task prioritization to meet deadlines, clarification of roles/responsibilities while collaborating, delegation, and retrospective evaluations of personal/peer performance.

Inclusivity & Classroom Culture:

Our SEA community embraces diversity of age, background, beliefs, ethnicity, gender, gender identity, gender expression, national origin, religious affiliation, sexual orientation, and other visible and nonvisible categories. We expect each one of you (and you should expect the same from us) to contribute to a respectful, welcoming, and inclusive environment. If you feel that you are not being welcomed, included, or accepted here, please reach out to one of your teachers or one of the deans at SEA to share your concerns.

Leadership Portfolio:

Reflected Best Self	10%
Case Studies	10%
Group Projects	10%
Participation (Including Voyage Journal)	10%
Watch Evaluation (at sea)	50%
Final Reflection	10%

Leadership Portfolio Components:

Reflected Best Self (10%):

This is a multi-part assignment. Over the first three weeks, you develop a cover letter where you show off your best self. You use the lenses below as well as the Leadership Questionnaire on page 71 of the Northouse text, emotional intelligence, and grit self-assessments to describe traits at which you excel and explain with applicable experiences.

Expedition Leadership Styles via the National Outdoor Leadership School (NOLS) Emotional Intelligence according to Goleman

OCEANS (Five Factor Personality Model)

Growth Mindset as defined by Carol Dweck

Five Practices of Exemplary Leadership according to Kouzes & Posner

Situation Awareness as defined by Mica Endsley

Grit as defined by Angela Duckworth

Extreme Ownership according to Willink and Babin

Additionally, you each collect stories from others about their best selves and construct a Reflected Best Self Portrait. This exercise allows you to assess yourself and reflect on the traits and strengths that are most likely to set you up for success as a leader.

Case Studies (10%):

During the six weeks in Woods Hole, you prepare case study assignments that require you to analyze a leader from multiple perspectives, using information and theory from the course. Our in-class discussions set you up in class to be able to complete an analysis of each leader's choices given the context.

Group Projects (10%):

Because collaboration and compromise are essential to leadership success, you work in groups to interpret, and project how best to address various dynamic environments; develop a presentation in Google Slides and use effective communication techniques to deliver your group's findings to the audience.

Participation (10%):

Leadership is best understood through discussion of credible expertise from primary and secondary sources, as well as through experience sharing, so participation in class discussions is essential. Skills labs involving hands-on operational training for tasks onboard - including Navigation, Safety, and Seamanship - are also considered in each student's performance evaluation for this learning activity. While at sea, participation is graded based on entries in your individual Voyage Journal.

Watch Execution (50%):

The training voyage is divided into phases. In the initial learning phase, each student progresses through a dynamic new environment with a broad array of essential information. In the next phase, your training expands through building team knowledge, skills, and abilities while also learning watch management through close observation (shadowing) of your Watch Officer. In the final Junior Watch Office phase, you lead your group through the watch routine, while conducting all ship operations. This progression is the product of ongoing learning, observation, and reflection.

While at sea, you demonstrate your comprehension and practical application of leadership and nautical science skills, while also showing initiative as a proactive member of a tight team. Professional staff and Captain evaluations are based on teamwork, leadership, and watchstanding skills, plus feedback after your JWO experience.

Final Reflection (10%):

At the completion of the sea component, your final task will be to reflect on your Reflected Best Self Portrait, SMART goals, and your experiences at sea in a final reflection due before leaving the ship. This final reflection is the culminating part of the Voyage Journal.

Anchor Texts:

- Bowditch, N.: *American Practical Navigator*, 2002.
- Chase, C: *Introduction to Nautical Science*. Norton, 1991.
- Duckworth, A: *Grit, The Power of Passion and Perseverance*. Simon & Schuster, 2016.
- Dweck, C: *Mindset, Changing the Way You Think to Fulfill Your Potential*. Random House, 2017.
- Endsley, M: *Toward a Theory of Situation Awareness in Dynamic Systems*. Human Factors Journal, 1995.
- Goleman, D: *Emotional Intelligence, Why It Can Matter More Than IQ*. Bantam, 2006.
- Gladwell, M: *Outliers*, Little Brown & Company, 2008.
- NOAA: *Chart No 1 PDF*, 2023.
- NOAA: 1210TR – Martha’s Vineyard to Block Island, Nautical Chart
- Northouse, P: *Leadership Theory*, Sage Publications, 2019.
- NWS: *NWS Observing Handbook No. 1 PDF*, 2010.
- Perkins, D.: *Leading at the Edge*, Harper Collins/Amacom 2nd Ed., 2022.
- Ruiz, D.M.: *The Four Agreements, A Practical Guide to Personal Freedom*. Amber-Allen, 1997.
- Willink, J and Babin, L: *Extreme Ownership, How US Navy SEALs Lead and Win*. St. Martin’s, 2015.
- Useem, M.: *The Go Point*, Crown Publishing 2006.

Supplemental Materials:

- Adichie, C.N.: *The Danger of a Single Story*. TED, 2009.
- Douglass, F: *Narrative of the Life of Frederick Douglass, an American Slave*. 1845 / 2021. Goldsmith, B: *Obsessive Genius, The Inner World of Marie Curie*. W W Norton & Co, 2004.
- HBR 10 Best Reads: *On Emotional Intelligence*. Harvard Business Review, 2015.
- Kouzes, J & Posner: *The Leadership Challenge, How To Make Extraordinary Things Happen in Organizations*. Jossey-Bass, 2017.
- Le, B.: *JWO Sheet Anchor*, SEA
- Mandela, N: *Long Walk to Freedom*. Little Brown & Co, 1994.
- Miyamoto, M: *Excerpts, translated*.
- Perkins, D: *Leading at the Edge*. Leadership Lessons from the Extraordinary Saga of Shackleton’s Antarctic Expedition. AMACOM, 2012
- Poehler, A: *Yes Please*. Dey Street, 2015.
- Tutu, D & Tutu, M: *The Book of Forgiving: The Fourfold Path for Healing Ourselves and Our World*. Harper Collins, 2015.
- Yousafzai, M: *I am Malala, The Girl Who Stood up for Education and Was Shot by The Taliban*. Little, Brown & Co, 2013.

Expectations and Requirements:

Active participation in class discussions and 100% punctual attendance are required. Late assignment submissions will not be accepted without notification to faculty 24 hours before the due date & time. Due dates on all work will be posted in Google Classroom.

Format for all written work is double-spaced, Times New Roman font, 12 pitch, one-inch margins, and APA style.

The policy on academic accuracy, shared below, will be strictly followed in this class.

The papers that you submit in this course are expected to be your original work. You must take care to distinguish your own ideas and knowledge from wording or substantive information that you derive from one of your sources. The term "sources" includes not only published primary and secondary material, but also information and opinions gained directly from other people and any text that you cut and paste from a site on the Internet. The responsibility for learning the proper forms of citation lies with you. Quotations must be placed properly within quotation marks and must be cited in their entirety. In addition, all paraphrased material must be acknowledged through accurate citation. Whenever ideas or facts are derived from your reading and research, the sources must be indicated. (Harvard Handbook for Students, 305)

Considerations for use of internet sources: *As you browse websites and new sources, assess their usefulness critically. Who posted or published the information and why? Can you trust them to be correct? Authoritative? Unbiased? (It's okay to use a source that is biased as long as you acknowledge and address the bias knowingly/transparently in your work.) Keep track of good sources that might be useful for subsequent assignments and annotate any websites you cite in your bibliography. Your annotation should include the name of the author or organization originating any material that you reference. If you can't identify the origin source, don't use it!*

Course Content & Competencies:

Self-Knowledge: Values, interests, and experiences that define temperament, character, ability to self-direct, adapt, and respond effectively to feedback

Emotional Intelligence: Skills and strategies necessary to develop healthy, constructive individual and group relationships in professional settings and beyond.

Nautical Science: Navigation, Weather Observations, Safety at Sea, Knot-tying, and more.

Self-Regulation & the Stress Response: Awareness of self/other, the biological stress response, how to manage emotions and behavior under pressure, in uncertainty, during change.

Critical Thinking and Decision Making: Situational awareness, mindfulness, triage, prioritization, delegation, decisions that shape behavior.

Effective Communication as Change Management: Delivery, coaching, and feedback strategies to prepare and support individuals, teams, and organizations to navigate change.

Leadership Temperament & Character: Maturity, balance, humility, resilience, capacity for gratitude and forgiveness, ability to encourage and inspire in the face of adversity.

LDE Class Schedule

SESSION	DATE & TIME	SESSION SUBJECTS	ASSIGNED READINGS
WEEK 1: Introduction to Leadership, Ship Responsibilities, and Voyage Journal			
LDE 1	4 JAN 0900-1030	Leadership Definitions Syllabus overview Voyage Journal guidelines	Northouse Survey
LDE 2	5 JAN 0900-1100	Nautical Science: Navigation Intro Nautical Chart	Chase, Ch. 8 and 9 Bowditch, Ch 4; sec: 400, 429-442, 453, 454 Essential knots, bends, and hitches www.animatedknots.com/boating
WEEK 2 Voyage Responsibilities (Session 3 & 4) Strategies for Effective Leadership (Sessions 5 – 7)			
LDE 3	8 JAN 0900-1100	Terrestrial Navigation	Chase, Ch. 10 Bowditch, part 2 Piloting, Ch 7, 9, & 10
LDE 4	11 JAN 1400-1600	Marine Meteorology	NWS Observing Handbook, “The Weatherwise Mariner” 32 Compass Points pdf Beaufort Force pdf Bowditch, part 10 - Marine Meteorology, Ch 38 & 40
LDE 5	12 JAN 0900-1100	Leadership Models Emotional Intelligence Growth Mindset Situational Awareness	Goleman Dwek Endsley
WEEK 3 – Leadership Styles Strategies for Effective Leadership (Sessions 5 – 7)			
LDE 6	17 JAN 1400-1600	Leadership Styles Extreme Ownership	Northouse Duckworth Willink & Babin

LDE 7	19 JAN 0900-1100	Management vs. Leadership	
WEEK 4 Safety of Life at Sea (Session 8) Applications of Leadership (Sessions 9-13)			
LDE 8	22 JAN 1130-1500	Safety of Life at Sea Massachusetts Maritime Academy Pool	Lookouts' Relative Bearings PDF Bowditch, Ch. 27, sec: 2716 Night Orders and Standing Orders Watch Quarter Station Bill
LDE 9	24 JAN 1400-1600	Decision Making Part 1 Hidden Traps in Decision Making Rules of the Road	Hammond
LDE 10	26 JAN 0900-1100	Decision Making part 2 Communications	
WEEK 5 - Applications of Leadership (Sessions 9-13)			
LDE 11	29 JAN 0900-1100	Applications of Leadership Earnest Shackleton	Perkins OCEANS
LDE 12	31 JAN 1400-1600	Applications of Leadership Bridge Resource Management Extreme Ownership Leadership Non-Examples	Parrott Willink & Babin
SHIP	1 FEB	Life at Sea Watch Standing	Bowditch, Ch. 27, sec: 2717 Watch Relief Procedures
LDE 13	2 FEB 0900-1100	Applications of Leadership Groups present their case studies	Case Studies

WEEK 6 Living well (Sessions 14&15)			
LDE 14	5 FEB 0900-1100	Stress and Its Effect on Humans Stress Management	Fricchione Sapolsky
LDE 15	5 FEB 1400-1600	Planning for Success SMART Goals LDE Voyage Essay	Doran

Guidelines for Respectful Discussion

General guidelines:

- Allow everyone the chance to speak.
- Do not interrupt or engage in private conversations while others are speaking.
- What is shared in the discussion circle, stays in the discussion circle. Keep confidential any personal information that comes up in the conversation.

As you listen to other participants...

- Listen carefully and respectfully, without interrupting.
- Be aware that tone and body language are powerful communicators. Show respectful listening by facing and looking at the speaker, making eye contact, staying quiet, nodding, etc.

When it is your turn to speak...

- Share briefly from your own experiences.
- Use "I" statements to state your views.
- Build on others' comments. Acknowledge them, even if you disagree. ● Be careful not to generalize about people and/or experiences.

Speaking up...

- If you think something is missing from the conversation, do not wait for someone else to say it; say it yourself.
- If you find another's statement to be problematic, do speak up.
- Try not to silence yourself out of concern for what others will think about what you say.

When interacting with other participants...

- Commit to learning, not debating.
- Challenge or criticize ideas, not individuals.
- Avoid blame, speculation, and inflammatory language.
- Be careful about putting other participants on the spot. Do not demand that others speak for a group that you

perceive them to represent.

Guidelines adapted from:

- General Discussion Guidelines, Columbia University, Center for Teaching and Learning. Online at <http://ctl.columbia.edu>
- Guidelines for Planning and Facilitating Discussions on Controversial Topics, Center for Research on Teaching and Learning, University of Michigan. Online at <http://bit.ly/21dJW9>.
- Talking Circles, First Nation Pedagogy. Online at <http://bit.ly/1Kl8jeA>.

NOTE: You are responsible for everything contained in this syllabus. In this case, ignorance is not bliss.

Also, this is a plan in which we can deviate from. Things happen and things can/will change. We will notify you of any changes in class or via Google Classroom or both.

You should check Google Classroom daily for any announcements or updates.