



Integrated Holistic Breathing: Healthcare and Self-Care Through Freeing the Breath

Syllabus

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February 6, 2023 to February 25, 2023 (times vary by day; see schedule below)

Target Audience and Instructional Level

This is an advanced-level pranayama course geared to students in the YogaX 300-hour Therapeutic Yoga Program (YTT300) and the following audiences:

- Healthcare, mental healthcare, and allied healthcare providers interested in bringing principles and strategies of pranayama and polyvagal theory into their clinical practice.
- Healthcare, mental healthcare, and allied healthcare students in graduate or medical programs interested in bringing principles and strategies pranayama into their supervised clinical practice.
- Yoga teachers interested in offering integrated holistic pranayama practices in the context of polyvagal theory, especially to students and clients in healthcare and mental healthcare settings.
- Yoga therapists providing integrated holistic pranayama practices, especially in healthcare and mental healthcare settings.

Training Pragmatics

- Cost: \$800 tuition for this 30-hour workshop **or** YogaX YTT300 prepaid enrollment
- This training is delivered via online synchronous instruction and with fulltime contact with the lead teacher, Chris Brems
- see Training Format below for specific details of training delivery
- Yoga Alliance Continuing Education credits (30 hours) are included in the tuition cost; a CE certificate is issued upon request
- Participation (by entering the zoom link and/or making payment) implies that you have read and agreed to the Stanford Assumptions of Risk, Release of Claims, and Hold Harmless Agreement at <https://www.yogaxteam.com/healthandsafetyinformation>
- YogaX Refund and Payment Policy is available at https://3de0fc17-ea21-4854-87c7-777a583c02cf.filesusr.com/ugd/37469f_73d3c9e8ebb14214a60e11d8b08baba1.pdf
- YogaX has no commercial support for this event and there are no disclosable conflicts of interest.
- The zoom links for this event are:
 - *Weekdays:* <https://stanford.zoom.us> TBA
 - *Weekends:* <https://stanford.zoom.us> TBA

Instructor

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Training Content Summary

This in-depth pranayama training investigates breath and breathing as a lifestyle practice that enhances physical, mental, and emotional health and wellbeing. Breath and breathing are the bridge between mind and body and functional breathing enhances physical and mental awareness of as well as the capacity to modulate energy, affect, and arousal.

The training emphasizes the biopsychosociocultural context in which all of us develop given its profound impact on health and breath. It explores collective and personal history with breath and breathing and grounds the practice of pranayama in this greater context. The training locates the breath in within the panchamaya kosha (or human development) model and as such presents a practice and theory that is integrated and holistic. Central to the development of supportive and healing breathing practices in yoga is breath awareness. It is the starting point for students or clients of yoga and remains a central practice even for seasoned practitioners. It is a practice of concentration, even meditation, that hones interoceptive skills and awareness. It is a practice that helps practitioners become more familiar with their neuroception and helps them recognize their autonomic nervous system state. As such, breath awareness is essential to the development of deeper self-understanding and capacity to heal and (re)discover wellness.

Breath-awareness and self-understanding serve as the pathway toward healing and self-regulation. Many breathing practices are examined, placed in the context of polyvagal and other breathing theory, with the purpose of equipping teachers/clinicians to offer students/clients a variety of breathing techniques. **Optimal functional breathing is emphasized.** Categories of breathing that are discussed and experienced include vitalizing, calming, and balancing breathing, all in the context of first achieving awareness, optimal respiration, and ultimately more complex breath control and respiratory health.

- **Balancing/stabilizing breathing practices** – Balancing breathing, as a bottom-up process of nervous system and emotional self-regulation, focuses on balanced inhalation and exhalation, balanced speed or vigor of breath, and awareness of breath texture and location. It invites a parasympathetic shift in the nervous system, balances mood, energy, and physical arousal, provides opportunity for exploring mind and emotions, and invites social engagement, a sense of safety, and equilibrium.
- **Vitalizing/energizing breathing practices** – Vitalizing breathing, as a bottom-up process of up-regulation to access emotional and physical balance, focuses on the inhalation, increased speed or vigor of breath, and the combination of breath and movement. It recalibrates an immobilized or collapsed nervous system, up-regulates mood, energy, and physical vitality, provides opportunity for exploring mind and emotions, and invites engagement, action, and initiative.
- **Calming/grounding breathing practices** – Calming breathing, as a bottom-up process of down-regulation to access emotional and physical balance, focuses on exhalation, decreased speed or vigor of breath, and combining breath and resting. It recalibrates a sympathetically aroused nervous system, down-regulates mood, energy, and physical activation, provides opportunity for exploring mind and emotions, and invites gentle curiosity, calming, and relaxation.

Understanding types of breath and student needs in the context of their unique biopsychosociocultural context model, their personal development, and polyvagal theory (or gunas, in the words of ancient yoga wisdom) allows teachers/clinicians and students/clients to access the breath in ways that are optimally adapted and tailored to individual needs and resources within a greater collective context and impact.

Land Acknowledgement

YogaX's home base in the School Medicine Department of Psychiatry and Behavioral at Stanford University sits on the territory of the Ramaytush Ohlone people.

You can learn more about their conservation efforts that continue to this day at <https://www.amahmutsunlandtrust.org>. Please consider a donation.

Learning Objectives

Learning Objective #1

1. Explain, apply, analyze, and evaluate the biopsychosociocultural context of breath and the history of pranayama
 - a. history of pranayama as one of the eight limbs of yoga in the ancient wisdom traditions
 - b. effects of BPSC on breath development, breathing health, and the energetic manifestation of breath
 - c. impact of the BPSC on the development of the koshas
 - d. understand how developmental factors may guide how breath manifests and is healed

Evaluation Method for Learning Objective #1

- situate pranayama in its historical and wisdom tradition context, especially as a limb of yoga
- identify and analyze the components of the expanded biopsychosociocultural context
- explain and analyze how BPSC affects human development
- analyze and evaluate the impact of the expanded BPSC on body, energy, and mind

Learning Objective #2

2. Explain, demonstrate, analyze, and evaluate the basics of breath, natural breathing, and pranayama
 - e. anatomy – the respiratory system and its biomechanics
 - f. physiology – gas exchange and biochemistry
 - g. optimal functioning breathing
 - h. characteristics of the breath – rate (cadence), volume, location, texture, resting pauses
 - i. the subtle energies of the breath – prana vayus (prana, vyana, samana, apana, udana)

Evaluation Method for Learning Objective #2

- analyze the core structures (or anatomy) of the respiratory system
- explain, evaluate, and apply physiology of breath, including gas exchange and the role of CO₂ and O₂
- analyze, evaluate, and create a teaching application about optimal functional breathing, including explaining the importance of nasal and diaphragmatic breathing
- analyze, evaluate, and create cuing about the characteristics of the breath that demonstrates its biomechanics and biochemistry
- based on careful analysis and evaluation, create a teaching application about the prana vayus, identifying the subtle energy represented by each

Learning Objective #3

3. Understand, apply, analyze, and evaluate polyvagal theory and its implications for human physiology, arousal, and affect
 - a. ventral vagal arousal: perception of safety
 - b. sympathetic arousal: perception of danger
 - c. dorsal vagal arousal: perception of life threat
 - d. mixed types of arousal: play, intimacy, freezing, etc.

Evaluation Method for Learning Objective #3

- analyze, evaluate, and create cuing related to the components of the autonomic nervous system
- analyze, evaluate, and create cuing for breathwork that supports the ventral vagus
- analyze, evaluate, and create cuing for breathwork related to working with the dorsal vagus
- analyze, evaluate, and create cuing for breathwork related to the sympathetic nervous system

Learning Objective #4

4. Understand, apply, analyze, evaluate, and create teachings related to the necessary preparations for teaching pranayama
 - a. environmental preparation
 - b. auspicious asana practices
 - c. tongue exercises
 - d. nasal breathing exercises

Evaluation Method for Learning Objective #4

- based on careful evaluation, create, and implement environmental preparations that are optimized
- based on careful analysis and evaluation, create, and teach a sequence of preparatory centering and asana practices
- based on careful analysis and evaluation, create, demonstrate, and teach a tongue exercises sequence
- based on careful analysis and evaluation, create, demonstrate, explain, and teach the importance of nasal and diaphragmatic breathing

Learning Objective #5

5. Based on the PVT and optimal functional breathing theory, apply, analyze, evaluate, and create teaching sequences of tailored breathing practices that integrated breath awareness as a foundational skill
 - a. breath awareness
 - b. optimal functional breathing
 - c. balancing breathing practices
 - d. vitalizing breathing practices
 - e. calming breathing practices

Evaluation Method for Learning Objective #5

- based on careful evaluation, create, and implement breathing self-assessments
- based on careful evaluation, create, and teach a guided breath awareness practice
- based on careful evaluation, create, and teach optimal functional breathing
- based on careful evaluation, create and lead a small group exercise focused on balanced breathing
- based on careful evaluation, create and lead a small group exercise focused on vitalizing breathing
- based on careful evaluation, create and lead a small group exercise focused on calming breathing

Yama and niyamas (the ethical code) assist us in ... reasoned restraint, acting as a firebreak for our behavior. Asana is a cleansing agent and pranayama begins to tug out consciousness (citta) away from desires and toward judicious awareness (prajna). Pratyahara is the stage at which we learn to reverse the current that flows from mind to senses, so that mind can bend its energies inward. Dharana (concentration) brings purity to intelligence (buddhi), and dhyana (meditation) expunges the stains of ego.

B.K.S. Iyengar, 2005, Light on Life, p. 176

Schedule and Continuing Education Hours by IAYT Category

Time	Date	Topic – Functional and Balancing Breath	TTP	TM	AP	YH	Prc	Spc
Week One 8-9a	Feb 6	Pragmatics; prep, breath dimensions observation	.5		.5			
	Feb 7	Prep, features and awareness of natural breathing		.5			.5	
	Feb 8	Prep, equal breathing in all dimensions		.5			.5	
	Feb 9	Prep including sun breath, four-part breathing – awareness to control		.5			.5	
	Feb 10	Prep, connection breath, alternate nostril breath		.5			.5	
Date	Time	Topic – Anatomy and Physiology of Breath	TTP	TM	AP	YH	Prc	Spc
Saturday Feb 11	8a – 9a	Pranayama in the context of integrated holistic yoga – koshas, limbs, accessibility				1		
	9a –10a	Pranayama – benefits, risks, indications, challenges, and intentions				1		
	10a – 1p	Anatomy and physiology of breathing			3			
Time	Date	Topic – Vitalizing Breath	TTP	TM	AP	YH	Prc	Spc
Week Two 12-1p	Feb 13	Prep, 4-part breath - extended inhale, top pause	.5		.5			
	Feb 14	Prep, gentle kriya, surya bedha (right nostril)		.5			.5	
	Feb 15	Prep, surya bedha+top retention, breath of joy		.5			.5	
	Feb 16	Prep, viloma segmented inhale+long exhale		.5			.5	
	Feb 17	Prep, stronger kriya, kapalabhati, breath awareness		.5			.5	
Date	Time	Topic – Accessible Adaptive Pranayama	TTP	TM	AP	YH	Prc	Spc
Sunday Feb 19	1 – 2:30p	Experiential anatomy and physiology of breath		1.5				
	2:30 –4p	Polyvagal theory and pranayama			1.5			
	4p – 6p	Creating accessibility and adapting pranayama – understanding balancing, grounding, and vitalizing breathing practice		2				
Time	Date	Topic – Calming Breath	TTP	TM	AP	YH	Prc	Spc
Week Three 8p-9p	Feb 20	Prep, gentle sun breath, awareness/observation		.5	.5			
	Feb 21	Prep, gentle sun breath, 4-part breath+long exhale+bottom pause, OFB feather breath		.5			.5	
	Feb 22	Prep, gentle sun breath, brahmari with extended exhalation		.5			.5	
	Feb 23	Prep, gentle sun breath, chandra bedha, four-part breath with extended exhalation		.5			.5	
	Feb 24	Pragmatics: sustaining practice; subtle breathing, pranayama of choice	.5				.5	
Date	Time	Topic – Teaching Strategies	TTP	TM	AP	YH	Prc	Spc
Saturday Feb 25	8 – 9:30a	Teaching balancing/stabilizing breath	1	.5				
	9:30 –11a	Teaching vitalizing/uplifting breath	1	.5				
	11a – 1p	Teaching calming/grounding breath, closure	1.5	.5				
Date	Time	Topic	TTP	TM	AP	YH	Prc	Spc
30 hours of YA CE or YTT300 in the following categories:			5	11	6	2	6	30

Notes: YA=Yoga Alliance; CE=Continuing Education

TTP=Techniques, Training, and Practice; TM=Teaching Methodology; AP=Anatomy and Physiology; YH=Yoga Humanities; Prac=Practicum; Spc=area of program specialization

Handouts Provided

Several handouts, training manual, and slide sets for the workshop will be provided to registered and paid enrollees by the end of the workshop. These materials are provided with the understanding that students will not duplicate, distribute, or otherwise publicly use these materials without express permission and proper attribution and referencing.

Materials to be provided include:

- *Content Manual for the Training*
- *Breath Assessment*
- *Impacts of Nasal versus Mouth Breathing*
- *Impacts of Diaphragmatic versus Chest Breathing*
- *Impacts of Various CO2 Levels*
- *The Five Winds of Prana*
- *Pathways of Sensory Processing Engaged in Integrated Holistic Yoga*
- *Principles of Trauma-Informed Yoga*
- *Gunas –Fundamental Expressions of Nature*
- *Eight Limbs of Yoga*
- *BioPsychSocioCultural Model*
- *Integrated Holistic Yoga – Koshas, Limbs, Biopsychosociocultural Context*
- *Slide Set for the Training*



*When walking in the awareness of the highest reality is firmly established
(i.e., when energy is not dissipated),
then a great strength, capacity, or vitality is acquired.
brahmacharya pratisthayam virya labhah
Yoga Sutra 2.38*

Suggested Readings

It is recommended that in preparation for the workshop you **read all YogaX blogs**, especially the following:

<https://www.yogaxteam.com/blog/blogbreath>

<https://www.yogaxteam.com/blog/physicallimbs>

<https://www.yogaxteam.com/blog/polyvagaltheory>

It will be helpful to have basic familiarity with pranayama prior to attendance, but it is not required. If you want to read a nice beginner's pranayama book, check out Givens (2020; see citation below). For a lovely overview of the healthful effects of breathing, check out this link:

<https://breathe.ersjournals.com/content/13/4/298>

Also, peruse YogaX webpage resources and **try out some of the offered free practices** (asana, pranayama, meditation, and more) at yogaXteam.com and on the YogaX Team YouTube channel, especially the following.

Breathing Practices playlist:

https://www.youtube.com/playlist?list=PLzvKZpUGjwIFmpZVzy_25k4Zr4GHm75Y5

Breath with Movement Exploring Energy and Mind:

https://www.youtube.com/watch?v=UxkZItWFQ7Q&list=PLzvKZpUGjwIFmpZVzy_25k4Zr4GHm75Y5&index=1&t=1s

Breath Observation and Mindfulness:

https://www.youtube.com/watch?v=TBzzzLcV7No&list=PLzvKZpUGjwIFmpZVzy_25k4Zr4GHm75Y5&index=8

Lovingkindness and Our Social Engagement System:

<https://www.youtube.com/watch?v=UBF-RjouWUQ&list=PLzvKZpUGjwIG2rpdZj8-MKPwgiQVXWgn7&index=6&t=863s>

Breathing: An Experiential Exploration of Respiratory Anatomy and Physiology

https://youtu.be/1C3S_ZVvZEE

The following readings will be helpful as you deepen your journey once you have completed the workshop.

Coulter, D. (2001). *Anatomy of hatha yoga*. Honesdale, PA: Body and Breath. [Chapter 2]

Dana, D., & Porges, S. (2018). *Clinical applications of the polyvagal theory: The emergence of polyvagal-informed therapies*. New York: Norton.

Givens, J. (2020). *Essential pranayama: Breathing techniques for balance, healing, and peace*. Emeryville, CA: Rockridge Press.

Iyengar, B.K.S. (2008). *Light on pranayama*. New York: Crossroads.

McKeown, P. (2021). *The breathing cure*. West Palm Beach: Humanix.

Nestor, J. (2020). *Breath: The new science of a lost art*. New York: Riverhead Books.

Porges, S. (2017). *The pocket guide to the polyvagal theory: The transformative power of feeling safe*. Norton.

Rosen, R. (2002). *The yoga of breath: A step-by-step guide to pranayama*. Boston: Shambala.

Rosen, R. (2006). *Pranayama beyond the fundamentals: An in-depth guide to yogic breathing*. Boston: Shambala.

Rothenberg, R. (2020). *Restoring prana*. Philadelphia: Singing Dragon.

Rosenberg, S. (2017). *Accessing the healing power of the vagus nerve*. North Atlantic Books.

Stephen, M. (2021). *Breath taking: The power, fragility, and future of our extraordinary lungs*. New York: Atlantic Monthly Press.

Training Format

The workshop uses mixed pedagogical methods, ranging from didactics/lectures to discussion to experiential work, including small group activities. Lecture/didactic time invites discussion throughout and is accented by experiential exercises and activities. The experiential work is yoga-based and includes asana, pranayama, meditation, and guided imagery. To make sure that everyone can enjoy the yoga-based activities safely and with maximum comfort, please note the following (more personal) thoughts and requests.

- Stanford University requires that you sign the release form (link above) to be able to participate in the activities that are part of this workshop. It assumed that you have agreed to this document when you pay or use the provided zoom link for the workshop.
- Required training activities start promptly. To make sure that we can start on time and that you have ample opportunity to get settled or ask questions, it would be lovely if you could arrive as much as 10 minutes early.
- Participants have to provide their own props for the virtual training sessions. Minimum prop equipment includes 2 yoga blocks, 1 yoga strap (10 feet is preferable), 1 yoga bolster, 1-2 blankets, and a yoga mat. Access to a clear wall space is extremely helpful (a closed door works). Prop substitutes are fine (e.g., a stack of books instead of blocks; a scarf instead of a strap, sofa cushions instead of a bolster, etc.). Please have all props at the ready for each training session.
- Yoga is best practiced on a relatively empty stomach but not starving. A sustaining but light meal prior to class will help you maintain your energy without having a full belly that makes bending and twisting difficult.
- Please ask questions – before class, after class, and during class. If you are wondering about something – whether it’s the reason for a particular shape or movement, an alignment question, or a more healthful way of doing something – someone else is likely to ponder the same thing.
- Always honor your own intuition and body wisdom – if something feels wrong, do NOT do it. We are all anatomically unique and we all express the same yoga shape, breath, or practice in different ways. What works for us, your teachers, or the person next to you, may not be optimal for you. Allow yourself the joy of using props and variations based on the feedback from your own body, breath, and mind. We offer both freely and demonstrate their use throughout.
- Yoga practiced in a group is inspirational. It is never competitive. Work within your own body limits and preferences; give yourself permission not to strive to do what others are doing. Delight in the pleasure of expressing each pose or breath in uniquely your way. If something comes easily, celebrate this state of pure joy; if something is a struggle, embrace the moment of learning.
- Thank you in advance for making me aware of any medical conditions that may affect your yoga practice. It is helpful for me to know if you are modifying practices for a particular reason or if you would like to have help in working with a particular concern.
- Thank for turning off all cell phones, beepers, or other noise-making or distracting devices before you settle in for any given training session.
- Thank you for keeping your cameras on during virtual sessions to the degree possible and appropriate.

