

# Marin Academy

# TRANSDISCIPLINARY LEADERSHIP PROGRAM

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## Information and Application

### Program Overview

The Marin Academy Transdisciplinary Leadership Program is a one-year, academic opportunity for focused engagement in real-world issues and problem solving. The pilot program, available for current juniors to apply for their senior year, has three main components:

1. A one-day leadership orientation and retreat for the TLP cohort, taking place on a Saturday or Sunday before the start of school (date TBD, but likely the weekend before the start of school. If we cannot meet in person, this retreat will be canceled and its content will be covered as part of class.)
2. A one-credit, transdisciplinary leadership course (worth two semesters electives)
3. A second-semester capstone project (as senior project) involving significant work in a community outside of MA

Through these components, students will both develop skills and knowledge and put them into immediate practice. Specifically, students will:

- Understand the nuances and complexities of societal issues, the different ways experts are approaching them, and the experiences of the people affected
- Strengthen empathy, cultural competency, and agency while harnessing natural curiosity
- Partner with institutions of higher learning, non-profit organizations, and/or companies
- Develop and design new solutions and approaches that bring a perspective of inclusivity and equity to complex problems
- Transfer and apply existing skills and knowledge while learning new skills and content within, between, and beyond academic disciplines

### The Transdisciplinary Course

Each year TLP faculty will offer a 1-credit course (a 2-block, one-semester class occurring the first semester of senior year) that focuses on a pressing complex, authentic, and relevant issue in contemporary society. During the first half of the course, students develop contextual knowledge through readings, research, and engagement in a series of conversations and activities with local, state, and national leaders. During the second half of the course, students apply what they have learned and leverage their skills and interests as they research, propose, and, if possible, implement solutions to address that course's problem or question.

#### Components of a Transdisciplinary Course

##### **TWO TEACHERS, TWO BLOCKS**

Students are guided by two teachers from different disciplines. The course runs during two adjacent blocks, B and C, if the schedule is an every-other-day one. If school is on a quarter-on/quarter-off schedule, the course will run during blocks C and F.

# TRANSDISCIPLINARY LEADERSHIP PROGRAM

## OUTSIDE PARTNERSHIP

The amount of time and scheduling of the course allows for meaningful partnerships with outside experts and organizations. All transdisciplinary courses will connect with multiple experts, but will have a specific, more dedicated partnership for students to be involved in meaningful, real-world work.

## PROJECT-BASED LEARNING

While there will be a variety of learning methods used (including lecture, exploration, project time, off-campus work, research, and online learning), the transdisciplinary course is based on the principles of Project-Based Learning (PBL).

- A relevant, complex, and authentic issue and driving question associated with it
- Student voice and choice
- 21st Century Skill development: Students will focus on developing MA's 5 Competencies (Demonstrated Empathy, Imaginative Curiosity, Intellectual Flexibility, Compelling Expression, and Strategic Boldness)
- Inquiry and Innovation: Students follow a trail that begins with their own questions, leads to a search for resources and the discovery of answers, and ultimately generates new questions, tests of ideas, and drawing of conclusions. With real inquiry comes innovation—a new answer to a driving question, a new product, or an individually generated solution to a problem. Students seek out and learn what is necessary to see their work to completion, wherever that takes them.
- Feedback and Critique: Beyond teacher feedback, student teams critique one another's work, referring to rubrics and exemplars. Outside experts or mentors may also provide critique.
- A Publicly Presented Product: Students will present to an authentic audience outside the classroom in some manner, likely with the partnership organization.

As the Buck Institute for Education notes, in PBL, "students work on a project over an extended period of time—from a week up to a semester—that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by developing a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as critical thinking, creativity, and communication skills in the context of doing an authentic, meaningful project. Project Based Learning unleashes a contagious, creative energy among students and teachers."

## INDEPENDENCE AND COOPERATION

The transdisciplinary course demands that students work both independently and cooperatively. Students will create team projects and must be accountable to self, team, and outside agency. They will be working with deadlines, but a fair amount of autonomy, which means they need to be able to manage their time, prioritize, and communicate well.

## **The 2021–2022 Transdisciplinary Course**

### **The Future of Cities: Civic Tech and Data Science**

Credits: Honors English and Math

*Essential Question: How might we build the future of our cities to work for all members of the community?*

By 2030, 125 billion connected devices are expected to be part of our daily lives. By 2050, more than 60% of the world's population is expected to live in urban environments. Around the globe, hundreds of new cities are being built from the ground up to meet these changing demands. More and more, city planners and stakeholders are examining how to gather and use data and technology to improve infrastructure, liveability, and sustainability in our rapidly growing and changing urban centers--our future cities. With this comes many questions: What are our future cities' greatest needs and challenges? What kind of data and technology is most helpful to the city and its citizens? What data

# TRANSDISCIPLINARY LEADERSHIP PROGRAM

should be publicly open to increase idea generation and innovation? How is data privacy and security ensured? Is equitable access for all citizens achievable? Focusing on applied statistics, data science, and English skills, you'll dive into data analysis and statistics, city planning and design, and theory and ethics around future-based visioning. Learning from case studies, speakers, history, literature, and more, you will gain a deeper understanding of both the wonder and complicated interplay between humans and technology, government, and the people. In the second half of the class, you will apply your skills and knowledge while working in partnership with the City of San Rafael to design, prototype, iterate, and eventually present a proposal to city officials that responds to the needs and challenges they have presented.

## The Capstone Project

At the end of second semester, all seniors are required to complete a 3-week, 100-hour senior project. For students in TLP, this project will be their TLP capstone and will be spent—either individually or as part of a group—working to address a larger societal issue with people/organizations outside of MA. This capstone project will commence in the third or fourth quarter as an extension of student work in the course, and it will be an opportunity to demonstrate the thoughtful and nuanced way that they have learned to examine an issue and design and implement solutions. While some students may continue the specific work they began in the TLP course, others will go in a different direction, bringing the skills and processes they learned in the course to another issue and/or organization.

## A Note about Leadership

Research consistently shows that leadership is primarily developed through experience—though how to hone and practice leadership can be learned. The Transdisciplinary Leadership Program focuses on both these realms; the course, leadership position, and capstone give students real-world experience to practice and to develop their leadership skills while specific lessons and tasks (developed through the leadership orientation and throughout the first-semester course) are designed to help focus students on strong leadership traits and practices. The leadership orientation and lessons integrated within the course have been developed with leadership expertise and research in partnership with a consultant from the University of Minnesota's Leadership Minor Program, the largest and oldest leadership minor program in U.S. secondary education.

## Eligibility Requirements

All current juniors are eligible to apply to the TLP. It is essential, however, that students consider their senior-year priorities before applying. TLP requires commitment to all components: students must be able to attend the August retreat; commit to prioritizing the course over other electives in their schedule; and commit to the program's capstone as their senior project.

Applicants are required to fill out the general application, submit an essay, and have the approval of their academic counselor.

## Important Dates

February 11, 2021: Informational meeting at 10:00 am on Zoom. Link in the email sent to all juniors.

March 5, 2021: Applications Due by 3:00pm

March 12, 2021: Applicants Notified

August TBD, 2021: TLP Orientation Day

# TRANSDISCIPLINARY LEADERSHIP PROGRAM

## FAQs

**Q: I want to apply to this program, but I don't know when other courses I want/need to take will be offered. What if they are in conflict?**

A: We will be building the schedule after students are accepted into the program to maximize student offerings and are ensuring that upper level visual and performing art, math, and world language classes are available to students who need/want them. It is important to note that very few seniors—literally fewer than a half a dozen each year—get all the classes and schedule they hope for. Almost all seniors have to prioritize their choices and end up having to choose between their hoped-for science, history, and English electives, for example. Students who apply to TLP are prioritizing the transdisciplinary course, which will count for one 2 electives (see course description for more information).

**Q: I already have ideas about my senior project and I don't think it will meet the TLP Capstone requirement, but I'm not sure. What should I do?**

A: Almost any senior project can be adapted to meet the capstone requirements, which focus on examining a larger societal issue with people and/or organizations outside of MA. You may not get to do exactly what you wanted to do how you wanted to do it, but your TLP cohort and teachers/advisors can help you think about how the general topic of interest can still be at the center of your capstone.

**Q: Is this program UC approved?**

A: Yes. The UC system will recognize these courses on a transcript. The class is designated with an honors English credit and an interdisciplinary elective math credit.

**Q: How do colleges and universities view this program?**

A: As this is our third pilot year, this is an unanswered question. However, while in development, over 25 college admissions offices—from Bates to Colorado College to Duke to Harvard to UCLA to Yale—weighed in with unanimous support. Comments like the following were shared:

*"We appreciate when students are able to think for themselves and act in the real world. Many students are so rubric focused they think there is a 'right' answer and consequently have difficulty dealing with our messy reality."*

*"... it would add great depth to learning for your students. This is something ...needed in redesigning the way we have this generation of students think and collaborate."*

*"[Our college] promotes an interdisciplinary education and I think a lot of students at MA are already thinking in this way. It would be awesome to see this implemented in the curriculum in this way."*

*"It would be unique to your institution and make your students stand out."*

*"[Our university] is a research-driven environment that endorses hands-on learning ... (and) we instead encourage students to explore and combine areas of academia in unique ways. This type of curriculum would be similar to what we offer."*

**Q: Which types of student will perform best in this program?**

A: Any committed-to-the-program student can be successful, especially those motivated by learning and action. Due to the nature of the transdisciplinary course, the most successful students will be those who have or develop a growth mindset and skills in cooperative learning, independent organization and responsibility, and flexible and creative thinking.

**Q: If I have/my teen has additional questions about the TLP, who should we ask?**

A: Students can contact KaTrina Wentzel (kwentzel@ma.org) or Sachi DeCou (sdecou@ma.org) with any questions!

# MA Transdisciplinary Leadership Program Application

Completed applications must be returned to the registrar (Leslie Rojas) by 3:30 p.m. Friday, March 5, 2021.

Name: \_\_\_\_\_

## **Part 1: Requirements**

The TLP Program has three components. The following questions are based on your understanding of and ability to commit to them.

1. Can you make yourself available to attend a full day TLP orientation the weekend before school starts?
  
2. Are you committed to your senior project meeting the guidelines and expectations of the TLP capstone project? In a broad brush stroke, this means examining a larger societal issue with people and/or organizations outside of MA.
  
3. The TLP transdisciplinary course will meet during B and C blocks (if meeting during an every-other-day schedule) or during C and F (if meeting quarter-on/quarter-off) during first semester senior year. This offers both opportunity and challenges; please initial the boxes below to signify your understanding of some of these.

I understand that MA commits to my ability to take any higher level math, world language, and arts classes during my senior year. I am also aware that by reserving these two blocks in my schedule, there will be restrictions in other elective offerings that will fit in my schedule including science, English, and history.

I understand that if on an every-other-day schedule, the two-block nature of the transdisciplinary course allows for flexible use of time between those blocks during on Semester 1 ABC days, including taking the entire time to be off campus.

# MA TRANSDISCIPLINARY LEADERSHIP PROGRAM

## Application

### Part 2: Essay Questions

On a separate document, compose responses to each of the following questions, writing 300 words or less per response.

1. Why are you applying to TLP?
2. What skills or attributes will you bring to TLP?
3. What do you think will be the most challenging aspect of this program (e.g., giving up something else you wanted for senior year or project management on a large group project) and how will you manage that challenge?

I certify that the information provided in this application is true and correct to the best of my knowledge.

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Applicant Signature

Date

I am aware that my child is applying to the Transdisciplinary Leadership Program and understand its requirements.

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Parent/Guardian Signature

Date

The prospective applicant has been advised that submission of an application to the Transdisciplinary Leadership Program will impact other course offerings available to them senior year.

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Advisor Signature

Date