Women in Applied Mathematics Mentorship Program

What is the Women in Applied Mathematics Mentorship Program (WAMM)?

The Department of Applied Mathematics at the University of Washington would like to invite undergraduates majoring in Applied and Computational Mathematical Sciences (ACMS) or Mathematics to apply for the Spring 2020 Women in Applied Mathematics Mentorship Program. WAMM is run by PhD students and allows undergraduates to partake in independent study projects on a topic of their interest and to have regular one-on-one meetings with a female graduate student mentor.

Participants will be matched with graduate student mentors based on their areas of interest. Throughout the quarter, the graduate student will provide reading materials to the undergraduate and the pair will meet to discuss these materials on a weekly basis. The format of this work could expand into a more hands-on research project. The project topic and goal would be determined by the student-mentor pair during their first meeting. At the weekly one-on-one meetings throughout the quarter, students and their mentors will have the opportunity to discuss not just the project materials, but also other topics such as career paths and the graduate school application process. The graduate students will hold informal study halls regularly throughout the quarter during which WAMM participants can work on their projects, meet other mentors, and get help on homework assignments. At the end of the quarter, the graduate students will organize a Colloquium for the undergraduates to give short presentations on what they learned throughout the quarter. Students will earn (1) academic credit upon successful completion of the WAMM program.

Students who are completing their junior year of an undergraduate degree are especially encouraged to apply.

Applications are due February 19 at 11:59 pm and participation in the program requires that the student be available for in-person
meetings on campus throughout the Spring 2020 Quarter.

Applying to WAMM

Eligible students who wish to apply to participate in WAMM can do so here.

You will need a PDF of your academic transcripts to complete the application (unofficial is acceptable).

2019 WAMM Participants

<table>
<thead>
<tr>
<th>Student</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Vanessa Lyu</td>
<td>Optimal Control in Marriage</td>
</tr>
<tr>
<td>Ondrea Robinson</td>
<td>HIV Modelling: Recreating Continuous and Burst Models</td>
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<tr>
<td>Anna Zhou</td>
<td>Neural Networks</td>
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<tr>
<td>Yiwen Qiu</td>
<td>Research About Wealth Inequality</td>
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<tr>
<td>Yiling Sun</td>
<td>Supervised Semantic Classification with Principal Component Analysis</td>
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<tr>
<td>Yinxi Pan</td>
<td>Predict Survivals on the Titanic</td>
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</tbody>
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Special thanks to mentors: Doris Voina, Natalie Wellen, Kelsey Maass, Olga Dorabiala, Micah Henson, Nora Gilbertson

2018 WAMM Participants

<table>
<thead>
<tr>
<th>Student</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Emily Flanagan</td>
<td>Bugs! Modeling Host-Parasitoid Systems</td>
</tr>
<tr>
<td>Emma Raible</td>
<td>MPF and Regulation of the Cell Cycle</td>
</tr>
<tr>
<td>Liz Ramsden</td>
<td>Finding a function from experimental data</td>
</tr>
<tr>
<td>Yusha Wang</td>
<td>Discrete Choice Modelling in Airline Network Management</td>
</tr>
<tr>
<td>Michelle Yeung</td>
<td>Face Detection Using Eigenfaces</td>
</tr>
</tbody>
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Special thanks to mentors: Kathleen Champion, Kelsey Maass, Kelsey Marcinko, Megan Morrison, Saumya Sinha

Frequently Asked Questions

Q: How long does the program run?
A: For Spring 2020 Quarter, students should meet with their mentors once a week for an hour and reschedule a meeting that is missed. There are 10 meetings total in the quarter, which means that the start date is flexible. Participants are expected to invest at least 4 hours a week between meetings on their readings or projects. The program concludes at the WAMM Slam on Friday, June 5th at 5-7pm.

Q: Do I have to be an ACMS or Math major to apply?
A: Students from any major are welcome to apply. A strong applicant will have successfully completed coursework in differential equations, scientific computing, and linear algebra.

Q: When is the application due and what supporting materials do I need?
A: The application is due February 19 at 11:59 pm and you will need a copy of your transcript (unofficial is fine).

Q: What are Tea Times?
A: The Department of Applied Mathematics hosts semiweekly tea times. This is an informal gathering of graduate students, faculty, and staff that includes tea and oftentimes snacks and additional activities. Student participants are highly encouraged to attend on Tuesdays and Thursdays 3:30-4:00 pm in LEW 337.

Q: What are some examples of projects that I could do with my mentor?
A: Perhaps you are simply interested in some mathematical topic (e.g. difference equations, decision trees, or mathematical models of the brain) and you want to learn more about it. Your mentor could help you pick out an appropriate text or paper on the topic and then you two could work your way through part (or all) of it over the course of the quarter. Projects can also be more problem-driven. Given a problem you are interested in solving (e.g. denoising an image, modeling forest fires, or predicting movies’ box office revenues), you and your mentor could explore different mathematical approaches to solving it and dive into the math behind the approaches.

Q: Where can I send additional questions?
A: You can email us at diversity ‘at’ amath.washington.edu

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