

## **(Almost) Everything you wanted to know about the Research Methods Course**

### *1. What makes the Research Methods Honors Bio different than Honors Biology?*

The Research Methods course REQUIRES that students develop, carry out, and complete, an independent, original science fair project during the course. Independent means that students will need to conduct all of the work for their project outside of class. The science teacher will inform students of due dates for proposals, procedures, data, and registration forms, and will assist students with completing required paper work, but the bulk of the project must be completed by students outside of class. Additionally, because science fair projects involve an extensive collection and analysis of data and results, students are also required to take the corresponding Research Methods Honors Math class. The Math teacher will introduce mathematical tools such as measurements, or formulas that students can incorporate into their data collection and analysis. The most important thing to remember is that science fair projects are required, and students need to develop creative and original problems to test and find answers to. The key to a successful project is finding a unique phenomenon to study, isolating a measureable variable, and collecting a significant amount of evidence to reach a conclusion.

### *2. How is the Research Methods Honors Biology course the same as the Honors Biology course?*

Both courses earn credit at the honors level. Both courses cover the same content. Students learn from the same textbook in both courses, and are exposed to similar instructional methods in both courses.

### *3. If I am able to enroll in the Research Methods course this year, will I have to enroll in a Research Methods course again next year?*

No. Some students choose to take a research methods course one year and not the next. There are also students who do not take the research methods course as freshman, but go on to take a research methods course at the sophomore level.

### *4. If I'm taking RM Bio, does my project have to be about Bio?*

No it doesn't - your research project can be about physics or chemistry or engineering or . . .

### *5. Do I have to take the RM class in order to participate in the Science Fair?*

No. Each year there are very small number students in grade 9 or 10 who participate in the Science Fair, but are not enrolled in an RM course. Additionally there are some students in grade 11 or 12 who also participate in the fair, but are not enrolled in an RM course.

### *6. Answer the following questions (honestly) to see if Research Methods would be right for you:*

	<b>Yes</b>	<b>No</b>
1. Do I like science, and would I love to design and carry out my own original experiment?		
2. Do I turn work in on time and rarely need reminders of what needs to be done?		
3. Can I work on my own and figure out my own answers? (I don't need help very often)		
4. Do I often have creative and original ideas?		
5. Do I pay close attention to detail – Do I like showing all my work on math problems?		
6. Do I avoid procrastinating? Can I set goals, checkpoints, schedules and stick to it?		

If you answered yes to the majority of the questions above, than you will probably enjoy the Research Methods course. Talk with your current teacher or contact the Director of Science and Engineering at the High School (Dave Hruskoci [dhruskoci@shrewsbury.k12.ma.us](mailto:dhruskoci@shrewsbury.k12.ma.us)) for more information.

**A message from 9<sup>th</sup> grade Research Methods Biology Students to 8<sup>th</sup> graders**  
**“If I could tell 8<sup>th</sup> graders something about Research Methods Biology, I would tell them . . .”**

It is a fun class with great teachers. Your teachers say it is very hard, but all this class has extra is the research project.

If you can time-manage yourself and your work, you should do research methods. It's a great class, like honors with a science fair project.

You must be very tedious and have good time management.

It's just like a normal honors bio class, but with an extra project. It's important to stay focused and get work done on time.

There is not a LOT of homework, but there is an amount of work where you will have to manage your time.

It's not that difficult. You might think you will be loaded up with homework but it's the same amount as an honors bio class. All you do differently is the science fair project in addition.

Do it! It's fun, you are with smart people moving quickly and doing great science that is supported with research.

It is a really good experience that teaches good time management. There is more homework, but it isn't much and you get to research something you're interested in.

Only take research methods if you already have an idea for a project. Once you have an idea about what to experiment, work on your project as soon as possible. Make sure you can work independently and stay motivated.

It is much more difficult to start and complete a science project than one may think. However, the regular course-load is the same as honors bio, but there are some critical crunch times for the project.

Research methods is not that difficult if you just manage your time! Homework is the same as honors, you just have different homework when you need to work on your project.

It is not as hard as you might think. The class is fun and the science project is just an added bonus that allows you to test whatever you are interested in. Just remember to pace yourself!