

Advanced Scientific Research

PURPOSE

The purpose of this course is to introduce the senior magnet student to basic research methodologies to assist in the development and implementation of a research project that coincides with the internship experience. This research endeavor embraces and incorporates the **Magnet Senior Research Project, Final Portfolio**, and the **Final Presentation**. It is critical that the student selects an internship within the first 4 weeks of this semester and has a definitive idea of the topic **within the first 3 weeks** of the semester because the course builds the research portfolio over the course of the semester. The **Seven Source Assignment** and the **Literary Review Paper** are the starting points in preparing a **Research Proposal** on which the final products are based. **Important Dates** listed below are sequentially planned and build upon one another so that the final products are a cumulative semester long process. *It is critical that students understand the importance of these assignments and the due dates of each one to ensure a successful research and internship experience.*

COURSE OBJECTIVES

The research student will:

1. be introduced to the basics of research methodology.
2. research, analyze, and evaluate the research literature of others.
3. design, implement and present the individualized research project.
4. be expected to turn in all assignments on time.

GRADING

| | |
|-----------------------------------------------------|-------------|
| ** Class Assignments | 15 % |
| Tests/Quizzes | 10 % |
| *Literary Review Paper/ 7 Source Assignment | 15 % |
| *Research Proposal/ Research Plan/Conference | 15 % |
| *Subproblems | 15% |
| *Research Portfolio | 15 % |
| *Research Presentation | 10 % |
| Final Exam | 5 % |

***Late Class Assignments will not be accepted....a zero will be received.*

**Major Assignments will be received late, but there will be up to 20% penalty for each day late.*

In case of inclement weather, check your wheelermagnet.com email account. You should expect that we will adhere to due dates unless otherwise notified.

IMPORTANT DATES (subject to change)

| | |
|------------------------------------------------|---------------------------|
| <i>First day at Internship</i> | 2/2 (Mon) |
| *Seven Source Assignment | 2/12 (Thurs) |
| Rough draft of Literary Review /Research Paper | 2/18 (Wed, peer edit) |
| *Final Literary Review Paper | 2/26 (Thu) |
| *Conferences for Proposals/Maps | 3/9-10, 3/12 |
| Proposal Rough Draft | 3/18 (Wed, peer edit) |
| *Final Research Proposal | 3/30 (Mon) |
| Rough Draft Basic Subproblem | 4/1 (Wed, peer edit) |
| *Final Basic Subproblem | 4/16 (Thurs) |
| Rough Draft Applied Subproblem | 4/22 (Wed) |
| *Research Portfolio | 5/4 (Mon) |
| <i>Last day at Internship</i> | 5/8 |
| *Presentations | 5/11-14 |
| Final Exam | 5/15 or 5/18 |
| Graduation | 5/22, 7:00 pm, KSU |

Research

Syllabus, Spring 2015
Kate.maloney@wheelermagnet.com

Dr. Kate Maloney

Wheeler High School, 521
kathleen.maloney@cobbk12.org

Research Class

COURSE MATERIALS

- (3) Three Ring Binders
 1. You will need a *1 inch* 3 ring binder with 4 dividers for this class. All work in this class will be placed in the binder in chronological order and will eventually be placed in the last section of the Research portfolio.
 2. You will need a *.5 inch* ring binder for the 7 Source Assignment
 3. You will need a *2 or 3 inch* ring binder for the Portfolio. You will need dividers for it and that number is equal to the # of subproblems your research will have + 3. Most students have 3 or 4 subproblems thus 6 or 7 dividers are needed.
- 2 Pocket Folders
- Highly recommended but not required: research notebook for personal notes during your daily internship process

COMMUNICATION

The most effective means of communications outside of the classroom is my e-mail address: kathleen.maloney@cobbk12.org or kate.maloney@wheelermagnet.com
I will send out weekly student group e-mails beginning the first of February when the students begin their internships.

I am located in Room 512/LL3/LL1 (depending on the time) ...please feel free to drop in and see me.

Very Important Reminders

Wednesday Classes are IMPORTANT!!!

- If you miss a class YOU are responsible for learning what you missed and turning in the new assignments the next day or on the assigned date.
- If you miss a quiz, you must make it up within 2 days upon returning to school and negotiate with me the best makeup time.

Do not send work and assignments to be graded via e-mail.

All ***Major Assignments** must be turned in on the assigned time and date regardless if the student is sick. The student is responsible for getting the ***Major Assignment** to the correct destination on time even if it is brought in by someone else. Note: these *** Major Assignments** are marked on the course syllabus under Important Dates and plenty of time in advance is given for the student to be working on it to make the deadline. **DO NOT PROCRASTINATE** and Wait Until the Last Minute.

During your internship time, I encourage you to meet with me anytime regarding your research. Just set up an appointment time with me via email or in person.

Communication is Essential!!!

This course is designed so that you can have a very positive and memorable experience in which you will be very proud, but you must decide that it is a high priority, do your best, be disciplined, be willing to learn some new skills and stay on schedule with due dates

The Internship and Research Classes are required for a Magnet Seal.

Research

Syllabus, Spring 2015
Kate.maloney@wheelermagnet.com

Dr. Kate Maloney

Wheeler High School, 521
kathleen.maloney@cobbk12.org

PLEASE SIGN AND RETURN THIS PART OF THE COURSE SYLLABUS. RETAIN THE SYLLABUS FOR YOUR REFERENCE. IF YOU HAVE ANY QUESTIONS, YOU MAY NOTE THEM BELOW OR CONTACT ME SEPARATELY.

Student's printed name

Class period

Student's e-mail

I have read and understand the terms of the Research Class 2015 Syllabus.

Student Signature

Date

Parent/Guardian Signature

Date

Parent/Guardian Printed Name(s)

Phone Number

Work/Daytime Phone Number