

izmir Institute of Technology, Department of Mathematics

## Guidelines for the Mathematical Research Project

### (Math 415/Math416)

#### Before Starting:

At least one month before subscribing to the courses Math 415 and Math 416, you should decide about the subject and areas in mathematics that you are most interested in and want to study. Then, you should communicate with the academic staff in our department and find a supervisor. As early as possible, with the help of your supervisor you may settle the topic of the Research Project. After that, you will have more than 14 weeks to work on it.

#### Course Expectations:

Students in courses Math 415/Math 416 are expected to do:

1. Independent Research/Study;
2. Learn a New Topic or Results (in general not included in our standard curriculum);
3. Analysis, Proofs, Problem Solving, Applications (at least one of them);
4. Preparing a Poster (Math 415); Writing a Report (Math 416)
5. Oral Presentation

\*\*\* Moreover, in order to get good progress, you are expected to meet your supervisor regularly and meet at least 10 times each semester, explain what you have learned so far and show your work and contributions.

#### Course Evaluation:

The Committee Members from the department of mathematics and your Supervisor will evaluate your Project Work according to all expectations listed above.

#### Your Supervisor:

1. Will help you to select the research topic
2. Can recommend useful references
3. Can explain the difficult points of the topic
4. Will provide a feedback on the development of your project
5. Will read and comment on drafts of your poster and report
6. Can guide you in preparing for your oral presentation

## About the Project Poster and Report:

In Math 415 we expect you to prepare a Poster and in Math 416 we expect you to write a brief Project Report. Both the Poster and the Report should show what you have studied, what you have learned and/or what kind of results you have obtained. Your poster and project report may contain the following basic parts:

1. Introduction
2. Main Statements and Results
3. Conclusion
4. References

Moreover,

- Your poster and report have to be written in English using correct grammar and clear sentences.
- Your poster and report should be well organized and written in your own words, except possibly some of the well known definitions and theorems.
- The bibliographic references should be properly given and you should be careful about academic honesty and plagiarism.
- The report should be written using Latex and delivered to your supervisor in pdf format before your oral presentation.

## About the Oral Presentation:

- After completing the Poster in Math 415 or Writing the Report in Math416, it is time to prepare your talk.
- You will have 20 minutes for your oral presentation.
- Depending on your topic and results, you need to decide about the organization and style of the talk. It could be better to communicate this subject with your supervisor.

