

# The 2012 M.Sc. Students' Guide

Welcome to the Faculty of Mathematics and Computer Science.

We hope that you will have a pleasant and productive two years here.

The following few paragraphs are intended to supply you with some academic and administrative information and ease your absorption.

The Faculty currently consists of two departments: (1) Mathematics, (2) Computer Science & Applied Mathematics. There are no barriers between the departments and you are encouraged to participate in courses and seminars of all parts of the faculty.

## 1. Studies

### 1.1 Degree Requirements

The M.Sc. degree is awarded upon the successful completion of 30 credits of courses and a thesis.

Most courses meet for two hours per week and carry two credits per semester.

To be granted a second year status, students must complete at least 18 points and submit an approved research proposal no later than the first day of the second academic year.

You are welcome to approach any person on the board of studies (best by e-mail first) if you would like to consult regarding your research or course selection:

Vered Rom-Kedar (head), Oded Goldreich, Gady Kozma, Ran Raz, Eran Segal.

Please use the address [horaa.math@weizmann.ac.il](mailto:horaa.math@weizmann.ac.il) for formal requests from the BOS.

See updates at the Moross Research School web site:

<http://www.wisdom.weizmann.ac.il/~vered/moross/Moross.html>

### 1.2 Recommended Path.

The first year should be devoted to selecting a thesis advisor and to taking courses, whereas the summer and the second year should be mainly devoted to research and to completing the academic course requirements. The balance between the course work load and the research is a non-trivial issue which should be well coordinated with your thesis adviser.

Three important recommendations for a good start:

- 1) Find a thesis advisor well before the summer – optimally in May-June.
- 2) Complete at least 22 credit points in the first year of study (6 courses in the first semester, 5 in the second).
- 3) Take on a research project as a course – it is a great way to learn and to get to know faculty members, see section 1.4.

## 1.3 Course Selection

The FUN seminar (see section 1.7) is mandatory to all first year students.

Students not belonging to the bioinformatics track have no other required courses. If you are not studying in this track you may explore courses both within and outside the Faculty. If you do wish to take a course in one of the other faculties or in another university you do need pre-approval of the chair of the board of studies (send a request to [horaa.math@weizmann.ac.il](mailto:horaa.math@weizmann.ac.il)).

Students in the bioinformatics track have a structured course plan which includes courses from several faculties, see the FGS web site for details.

**Guided reading courses:** When a group of students are interested in a course which is not offered, it is sometimes possible to organize a reading course – you are most welcome to initiate such activities.

**Enrichment course program:** A couple of courses per year are taught by selected PhD students. These courses appear with zero credit, yet, upon recommendation of the instructors, students that fulfill all the requirements will gain 2 points credit for this academic activity.

## 1.4 Projects

Research projects are a useful way to familiarize yourself with the research of a faculty member (e.g. of a potential advisor). Projects normally require 8 hours of work per week and carry up to 2 credit points per semester. Occasionally a faculty member will advertise a topic for a project. You may also contact directly individual faculty members to try to initiate a project.

## 1.5 Choosing an Advisor

Every student is expected to choose an advisor by **the end of the spring semester** to begin working on his/her thesis in the summer of the first year. Please take time during the first year to learn about the research interests of faculty members, either by attending courses, attending the FUN seminar and other seminars, checking personal web pages and/or discussing potential research topics with faculty members. A booklet describing the research interests of the Faculty is available from each of the departmental offices. Most of this information is also available on the Internet. It is strongly recommended that you **do not wait until the summer to start looking for an advisor** since some faculty members may be away during the summer.

## 1.6 Direct Ph.D. Program

A student who has done particularly well **in research** may apply to be transferred to the direct Ph.D. program. Details (e.g. the final date such a transfer may take place) are provided in the Feinberg Graduate School website.

## 1.7 FUN Seminar

The FUN ("Faculty Union New students") Seminar is coordinated by Prof. Michal Irani and Prof. Boaz Nadler. It is held on Sundays, 12:30—13:40.

In this seminar, scientists from the Weizmann Institute present their research interests. The intention is that these presentations will survey the goals and main past achievements in the respective research areas, as well as current and future research directions in which students can get involved.

*Every first year M.Sc. student is required to attend the FUN seminar.*

Other students and faculty members are also welcome to attend. There are no credit points awarded for attending the seminar. A light lunch is served before the seminar.

## 1.8 Seminars

Attending seminars is a great way to learn about hot topics and about the way high-level research is conducted. Here is a list of our ongoing faculty seminars:

- 2 - Computer Science Seminar: Sunday 11:00
- 9 - Foundations of Computer Science Seminar: Monday 14:30-15:30
- 3 - Faculty of Mathematics and Computer Science Seminar: Tuesday 11:00-12:00
- 1 - Mathematical Analysis and Applications Seminar: Tuesday 11:00-12:00
- 7 - Seminar in Geometry and Topology: Tuesday 16:00-18:00
- 5 - Algebraic Geometry and Representation Theory Seminar: Wednesday 11:00-12:20
- 6 - Geometric Functional Analysis and Probability Seminar: Wednesday 11:00-13:00
- 13 - Vision and Robotics Seminar: Thursday 12:00-13:00

You can join the mailing list of each of these seminars and get an e-mail reminder for the talks: send [Amir.gonen@weizmann.ac.il](mailto:Amir.gonen@weizmann.ac.il) an e-mail with a list of NUMBERS of the seminars that you wish to subscribe to.

In addition, you may visit the seminars' page in the faculty homepage:  
<http://www.wisdom.weizmann.ac.il/math/events.shtml>.

Many of the seminars have google calendars which you can subscribe to (provided you have a gmail account).

It is also recommended to check the Weizmann calendar for seminars in other faculties and for special events.

## 1.9 Faculty Coffee and Tea

Coffee, tea and cookies are served every day at 15:30 in the faculty lounge, room 141. You are invited to participate, meet fellow students and faculty and discuss research and course work.

HAPPY THURSDAY: Beer and snacks - Every Thursday at 16:30 in the faculty lounge, room 141

## 1.10 Rules and regulations

Additional information about rules and regulations of the Graduate School can be found in the Feinberg Graduate School website.

# 2. Administrative Information

## 2.1 Registration in the Faculty

All new students (including non-registered ones) are requested to approach the secretariat in Room 7 as soon as possible and in order to fill a short form with personal details. It is important that your details be clearly written and remain always current, so that you may be contacted if needed. Computer access, library keys and copy machine cards will be arranged for registered students.

## 2.2 Rosters

At the beginning of every month, each student receiving a stipend should pick up his/her salary slip and must report his/her monthly attendance in the FGS website (every month students will receive an email notification to collect the salary slips and a reminder to fill in the attendance report include a link where you can do it). The salary slips are available in the departmental offices: Ziskind Room 228 for Computer Science & Applied Mathematics and Ziskind Room 103 for Mathematics. Information related to illness, reserve duty, vacation and other absences should be reported in the attendance roster online and relevant documents should be sent to Dana Yanay at the Feinberg Graduate School.

## 2.3 Mail

All full-time registered students will be assigned a (shared) mailbox on the second floor.

## 2.4 Office Space

Two rooms on the first floor of the Ziskind building have been allocated as communal rooms for all first year M.Sc. students. They host roughly 40 PCs and desks. Keys and place assignments will be available from the department administrator, Raanan Michael. A small number of PCs and Unix machines are also available for general use in room 13.

## 2.5 Copy Machines

There are several copy machines in the Ziskind building, one or more on each main floor, though the machine in the basement is primarily for use by the faculty and the administration. Copy machine cards will be issued to full-time registered students. The cards allow a limited number of copies (500 copies per three months), and can be renewed periodically by Daniella Simenski, Efrat Mashaev or Orit Wessely in Room 7. Please safeguard your card – you will need to pay for replacing it. Non-registered students may purchase copy cards in Room 7. Please recycle and keep your printing and copying to a minimum.

## 2.6 Library

Yifat Belous, the librarian, will distribute library keys upon request to full-time, registered students.

## 2.7 Supplies

A limited amount of paper, pens, pencils and stationary is available (for work/study use only) from each of the departmental offices.

# 3. Computer Accounts

## 3.1 General

The most updated material regarding computer facilities is listed on the faculty web site <http://www.weizmann.ac.il/wisdom/internal.shtml>, and on the WICC web site <http://www.weizmann.ac.il/CC>,

The wiki page : <http://math96-lx/wiki> (works only from within Weizmann) contains additional tips and explanations.

We have 5 computer system personnel available for help when instructions are unclear or with specific matters listed below. **Your questions are very welcome. We will do our best to help you.**

Our Faculty administrator Raanan Michael is the coordinator of computing activities in the Faculty. Please address him with general or unsolved computer related questions.

Access is permissible to the three computer accounts listed below, with the same userid and password (specified in the documents you received from the Feinberg Graduate School):

1. **Internal services:** These services allow students to check their grades in courses, update personal details, obtain library services (such as book loans, please use within reason), etc. The Internal Services can be accessed only from systems within the Weizmann Institute. This is done through <http://www.weizmann.ac.il>, by clicking on Internal Site, then choosing Internal Services from Support Services, clicking on Internal Services, and finally supplying your userid and password.

2. **Unix system:** The Faculty of Mathematics and Computer Science is equipped with a number of servers which use the Unix/Linux operating system. This system is called *wisdom*, which stands for "Weizmann Institute of Science, Department of Mathematics". A few Linux computers and Computer Clusters are available for students' and scientists' use. Questions and problems with the Unix system should be reported to Leah Mory (Room 20) or Amir Gonen (room 19)  
[Leah.Mory@weizmann.ac.il](mailto:Leah.Mory@weizmann.ac.il),  
[Amir.Gonen@weizmann.ac.il](mailto:Amir.Gonen@weizmann.ac.il)
3. **Windows system:** Most computers in the faculty are PCs which use the Windows operating systems. Your userid and password can be used to access the **wisdom2k3** domain in these machines. Further information about the Windows system is given below. Questions and problems with PCs should be referred to David Avi or Ron Yogev (Room 21, phone 3732).  
[David.avi@weizmann.ac.il](mailto:David.avi@weizmann.ac.il)  
[Ron.yogev@weizmann.ac.il](mailto:Ron.yogev@weizmann.ac.il)
4. You also have an exchange account, which lets you access your mail from the xmail server.

## **Email**

Your email address for incoming and outgoing email is defined in the Internal Services. The address is usually set according to the format of [Firstname.Lastname@weizmann.ac.il](mailto:Firstname.Lastname@weizmann.ac.il). This is a virtual address, which forwards the e-mail messages to a real account. The virtual address is called "External Address", while the physical address is called "Internal". The internal address can be on a Weizmann server, i.e. [userid@xmail.weizmann.ac.il](mailto:userid@xmail.weizmann.ac.il), but students who have a private e-mail account can choose to set their "Internal" e-mail to their private e-mail address.

- To forward your Weizmann mail to Gmail or any other mail service:

Login to the Internal Services as described above, Choose "Internal Services – Java Sun Version", Enter your user name and password., Click on "Doar", If a service agreement appears, click "Accept". In the field "Internal e-mail address", type in the address you would like your mail delivered to. Click "Send"

Please look also at: <http://www.weizmann.ac.il/CC/email/eaddress.html>,  
[http://www.weizmann.ac.il/DP/user\\_reg/email\\_eng.html](http://www.weizmann.ac.il/DP/user_reg/email_eng.html)

If you have already been assigned an exchange account, you must set a forward to your private account there.

- There is an option to configure gmail and yahoo, and possibly other mail providers, so that emails sent from gmail appear as if they were sent from [weizmann.ac.il](http://www.weizmann.ac.il) (an alias account). It still preserves the option to send emails in the normal way (as sent from the normal gmail domain).

In gmail: Settings -> Accounts and Imports -> Send email as (Click on button "Send email from another address")

In yahoo: Options -> More Options -> Accounts -> Add Account

The supported Email utility is Outlook. The outgoing SMTP server name is: xmail.weizmann.ac.il

### **Reading e-mails from outside the institute**

You can use <http://xmail.weizmann.ac.il/owa> to read your e-mails.

### **Remote access to scientific papers**

Scientific papers can be accessed from home using the Athens service offered by the Weizmann library. All you need to do is login using your standard username and password and then search for the required papers via the list of resources available there. To learn more, please visit: <http://www.weizmann.ac.il/library/howTo/athens.html>

### **Remote access**

Registered students are authorized to connect to the institute network via remote access. A security card is needed for this. Students who need a remote access to the Weizmann internal network for more purposes (aside from accessing papers and using e-mail) may get a secure id card (to get a secure id, please approach the secretariat in room 7).

## 3.2 PC and Windows

### **Disks Space**

The hard disk on the PC is divided into partitions. The first partition (Drive C) is for the operating system and software installation only. Please do not store anything on this drive. All other partitions on that PC may be used. If the operating system crashes, all the data on partition C will be lost.

### **Software Installation**

By default, the software installed on the PCs is what is mostly needed. If you require any special software, contact Ron or David, and they will try to help you get and install it.

### ***INSTALLING UNLICENSED SOFTWARE IS ABSOLUTLY FORBIDDEN***

### **Internet support**

The PC team supports Internet Explorer browsers. To get out from the Weizmann intranet, user should use the PROXY server.

All the PCs in the domain get the proxy automatically when using IE (Internet Explorer).

Other browser setup procedures can be found here:

<http://www.weizmann.ac.il/IU/proxies/configure.html>

## Printers

For printer useage, users can install network printers from the printer server. The printer server is PRINTERS64. You can browse one of the servers and install relevant printers from them.

## Backup

By default, Windows-based PC workstations are NOT backed up and the hard disks are not connected. Please try to maintain your own backups as needed. File stored on the UNIX servers (which you can access from a PC) are backed up daily and can be accessed from all the PCs. However, the amount of the data that can be stored on UNIX is limited, so please use these only for critical data.

You can map a network drive on the windows as follows:

Double click **My Computer** then press **TOOLS -> MAP NETWORK DRIVE**

**Map Network Drive** windows will pop up, select a new drive letter.

In the **folder** enter **\\<fileserver>\<your user ID on Unix>**.

Usually the file server name is mnetapp02.

Further computing information can be found on the faculty web page <http://www.wisdom.weizmann.ac.il/> by clicking on 'Links' and then 'Internal Information'.

## Connecting to a Linux server

From the department:

- You can find further information on connecting to and using the computing system at <http://math96-lx/> Double-click the *PuTTY* icon on your desktop.
- In the Host Name box, type in the name of a Linux workstation. Possible names are math02-lx through math13-lx.
- If you would like to use X Windows, expand the *SSH* branch on the tree in the left of the window, click *X11*, and check *Enable X11 Forwarding*.
- Click the Open button.
- You will be asked for your UNIX username and password, then presented with the UNIX prompt.
- Make sure to run Xming or eXceed before opening any X Window program.

From outside the department:

Requested a SecureID device, which will enable remote access through the firewall.



## 4. A Short List of Do's and Don'ts

We depend upon your personal sense of responsibility. Please help us to avoid waste of money and resources. We view you as partners in the common effort to maintain a pleasant and effective working environment.

1. Be an active member of the scientific community: participate in seminars, come to tea, discuss your research, homework and projects with your fellows.
2. Please exercise community responsibility. This means respecting the needs of others, maintaining silence in the library, the common rooms and the terminal room, registering all books taken from the library and returning them on time, keeping the premises clean, and so on.
3. Please use Institute facilities or supplies only for purposes which are related to your studies and projects at the Institute.
4. Avoid unnecessary printouts and copies. This applies even more strongly to the use of color printers. Do your editing on the terminal as much as possible.
5. Do not give your password to anybody else and do not let others use your account.
6. Please respect the privacy of others. Do not try to enter into other people's accounts.
7. Logout whenever you leave the computer in order to protect your files and privacy. Do not turn the machine off. Do not lock the screen in the public user space for a period of longer than 10 minutes.
8. Do not install illegal software on institute computers.
9. Do not play computer games.
10. Do not download long movies and other types of large files.
11. If you have to relocate hardware, always consult Yaakov (room 19).
12. Please help us by reporting instances of improper use or other abuses of the system. Suggestions for improvements are welcomed.

## 5. Faculty Administration

### Dean

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## Board of Studies

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## Library

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