# The 2010 M.Sc. Students' Guide

Welcome to the Faculty of Mathematics and Computer Science.

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

The following few paragraphs are intended to supply you 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 the board of studies if you have special research/course needs.

e-mail: horaa.math@weizmann.ac.il

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

Vered Rom-Kedar office hours: Zyskind 211, Mondays 14:00-16:00 or by appointment by e-mail.

## 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 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 bioinformatic track have no other required courses. So, if you are not in this track you may explore courses in the Faculty and outside of it. Note that if you do want to take a course in one of the other faculties or in another university you do need a pre-approval of the chair of the board of studies.

Bioinformatic track students have a structured course plan that includes courses from several faculties, see FGS web site for details.

# 1.4 Projects

Research projects may be 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 individual faculty members directly 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 which describes the research interests of the Faculty is available from each of the departmental offices. Most of this information is available also on the Internet. It is strongly recommended that you **don't 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 transfer 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. Ronen Basri. 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 area, 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
- 5 Algebraic Geometry and Representation Theory Seminar: Monday 11:00-12:20
- 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: Wednesday 11:00-12:00
- 6 Geometric Functional Analysis and Probability Seminar: Thursday 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 <u>leah.mory@weizmann.ac.il</u> an e-mail with a list of NUMBERS of the seminars that you want 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).

Also, look at 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.

## 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 the non-registered ones) are requested to approach the secretariat in Room 7 as soon as possible and fill out a short form with their details. It is important that your details be clearly written and remain always up to date, so that we can contact you if needed. Computer access, library keys and copy machine cards will be arranged for registered students.

# 2.2 Rosters

At the beginning of each month, every student who receives a stipend must take his/her salary slip and report on absences in the FGS website (each month you will receive a mail notification to collect the salary slips and a reminder to fill up the absence report including 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 Zisking Room 103 for Mathematics. Information related to illness, reserve duty, vacation and other absences should be reported in the presence roster online and relevant document 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 Zisking building have been allocated as a common room for all first year M.Sc. students. They have 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 keep your card – you will need to pay for it if you lose 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

Steve Manch, 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 are listed on the faculty web site <u>http://www.weizmann.ac.il/wisdom/internal.shtml</u>, and on the WICC web site <u>http://www.weizmann.ac.il/CC</u>,

We have 5 system people that should be able to help you when the instructions are unclear or with specific matters as listed below. Your questions are very welcome. We will do our best to help you.

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

You have now access to the three computer accounts that are listed below, all 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 <a href="http://www.weizmann.ac.il">http://www.weizmann.ac.il</a>, clicking on Intranet, then on Internal Services, and then supplying a userid and password.
- 2. Unix system: The Faculty of Mathematics and Computer Science is equipped with a number of servers that use the Unix/Linux operating system. This system is called *wisdom*, which stands for "Weizmann Institute of Science, Department of Mathematics". Among other things, emails are transferred to the Unix system and can be read by accessing its servers, and backups are made only for the Unix servers (see 3.2, backups). Few Linux computers and Compute Clusters are available for students and scientists use. Questions and problems with the Unix system should be reported to Leah Mory (Room 20), Leon Samuel or Amir Gonen (room 19)

Leah.Mory@weizmann.ac.il, Leon.Samuel@weizmann.ac.il, 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 Ron.yogev@weizmann.ac.il 4. You also have a SAMBA account, which lets you access your Unix files as a virtual PC disk drive (see section 3.2, backup).

## <u>Email</u>

Your email address for incoming and outgoing email is defined in the Internal Services. The address is usually set according to the format of <u>Firstname.Lastname@weizmann.ac.il</u>. This is a virtual address, which forwards the e-mail messages to areal accounti.e <u>userid@wisdom.weizmann.ac.il</u>. Students who have private e-mail accounts can choose to further forward their e-mail from the weizmann account to their private e-mail address.

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

Point your browser at <u>http://www.weizmann.ac.il</u>, Click on Intranet -> Internal Services, 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: <u>http://www.weizmann.ac.il/CC/email/eaddress.html</u>, <u>http://www.weizmann.ac.il/DP/user\_reg/email\_eng.html</u>

• 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 <u>weizmann.ac.il</u> (an alias account). It still preserves the option to send emails in the normal way (as if 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 utilities are: Outlook, Outlook express, Mozilla Firefox Mail. To read mail via the institute Email software, you can use POP3 (download and delete the mail from the server) or IMAP (recommended protocol) protocol.

The IMAP server name is: imap.wisdom.weizmann.ac.il The POP3 server name is: pop3.wisdom.weizmann.ac.il The outgoing SMTP server name is: narkis.wisdom.weizmann.ac.il

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

You can use <u>http://wmail.weizmann.ac.il</u> and login to Math-imap to read your e-mails. Use your Unix userid and password.

#### 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 to partitions. The first partition (Drive C) is for the operating system and software installation only, so please do not store anything on this drive. You can use any of the other partitions on that PC. If the operating system crashes, all the data on partition C will be lost.

#### Software Installation

By default, the software installed on a PC is what the user mostly needs. If you need any special software, contact Ron, Yorram or David, and they shell 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 PROXY server.

All the PC in the domain get the proxy automatic when using IE (Internet Explorer). Other browser setup procedure can be found here: <u>http://www.weizmann.ac.il/IU/proxies/configure.html</u>

#### Printers

To use a printer, users can install network printer from the printer server. The printer server is PRINTERS64. You can browse one of those servers and install the printers from one of them.

## <u>Backup</u>

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 using a SAMBA service account) 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 **\\<samba server>\<your user ID on Unix>.** The password to enter samba is your password on UNIX.

The samba servers are: negev, autumn, winter, math05-lx, math03-lx, math04-lx

You have to remember that the SAMBA service is slower than the local drive and there is a size limit. However, if you store your files on a PC it is your responsibility to backup those files.

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

## Connecting to a Linux server

From the department:

- 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:

You need to request a SecurID 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 quiet 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. Avoid leaving your e-mail in the system's spool.
- 9. Do not install illegal software on institute computers.
- 10. Do not play computer games.
- 11. Do not download long movies and other types of large files.
- 12. If you have to relocate hardware, always consult either Nick or Yaakov (room 19).
- 13. 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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