

INTRODUCTION TO DESIGN STUDIO I: LEARNING BY DOING

IE University

Professor: **ANDREA CARUSO**

E-mail: acaruso@faculty.ie.edu

Academic year: 22-23

Degree course: FIRST

Semester: 1^o

Category: BASIC

Number of credits: 6.0

Language: English

PREREQUISITES

The students are required to be familiar with hand drawing, computer skills in order to research and compile presentations (Keynote, Powerpoint, Indesign, Illustrator). It is highly recommendable to know some fundamentals of computer aid drawing - 2D and 3D (i.e. Rhinoceros, Autocad, Sketch-up etc.). Students must have a very good predisposition to manual work, using different types of materials, tools and machineries. Students must also know to be critical, share their knowledge, work both individually and in group, help the peers, respect class rules and timings.

SUBJECT DESCRIPTION

The subject aims to be an introduction to the project-based learning model and the skills needed to lead a design process from the concept definition, production and final presentation. Being projects the vertebral structure of the degree, it is relevant that the student learns the types of activities that will be carried out. The goal is to allow the student to determine, evaluate and monitor the work he develops while proposing solutions to the exercises which the teacher suggests. The interaction and observation of the different ways of approaching the same problem from similar perspectives (the work of peers) will help students to learn how to develop new skills in every situation, in the search of a personal point of view on the project, which will gradually become their own language.

OBJECTIVES AND SKILLS

The main themes and skills to be acquired will be:

- To practice problem solving by proposing, prototyping and executing solutions that will be reviewed;
- To get familiar with and put in practice the creative method: problem analysis, concept definition, research, prototyping, evaluation and communication;
- To learn how to express an idea with hand sketching and model making;
- To acquire the foundations in relation to material processing through manual work, getting familiar with carpentry techniques, manual tools and Fablab technologies;
- To get familiar with collaborative design projects;

- To get familiar with the analysis of the important factors of the design method as function, form, user usage, durability, sustainability;

METHODOLOGY

The course is given in F2F format only. The course is divided into different consecutive workshops, all of them composed of theoretical and practical activities. Engagement through reading assignments, class discussions, hands-on work, both individual and group work. Students are expected to deliver assignments constantly throughout the course, collective debates will be held every session to share contents and points of view. Interactivity is critical to the learning process and therefore students will be encouraged to share their thoughts and ideas in relation to issues presented in each seminar.

Students will dedicate their INDIVIDUAL STUDY HOURS to: Individual Study, Preparation of Assignments and Tasks.

The course is divided into 4 milestones through 8 different assignments, either individual or group work:

1st MILESTONE

Assignment 1: The Table Lamp - A3 Craft Paper Sketch (individual)

Assignment 2: Table Lamp Blueprints - A3 White Paper Sketch (individual)

2nd MILESTONE

Assignment 3: Author Case Study - Reduced Pecha Kucha - 15 Pages x 15 Seconds each, Horizontal Ppt (individual)

3rd MILESTONE

Assignment 4: Cardboard Scale Model 1:1 (group)

Assignment 5: DIY Table Lamp Model 1:1 (group)

4th MILESTONE

Assignment 6: Photo, Prints & Frames (group)

Assignment 7: Printed Booklet (group)

Assignment 8: Final Presentation & Participation (group / individual)

Teaching methodology	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	20.0 %	30 hours
Discussions	20.0 %	30 hours
Exercises	30.0 %	45 hours
Group work	20.0 %	30 hours
Other individual studying	10.0 %	15 hours
TOTAL	100.0 %	150 hours

PROGRAM

SESSIONS 1 - 3 (LIVE ONLINE)

COURSE & SKETCHING INTRODUCTION

Presentation and Lecture

This first session is dedicated to explain the subject and its objectives, the methodology of “Learn by Doing” and the fundamentals of the design process. We will reflect upon the notions of “research, project, production, sale, and consumption” as key factors for the design practice. We will go through the basic technique of hand-sketching as a fundamental tool of observation and analysing the products which surround us. The professor will also present the structure of the course along with other practical aspects in relation to the evaluation system and the functioning of the class will be discussed.

Structure:

- Introduction to the course
- Sketching Technique Workshop: markers, colours, and types of papers (white, craft and blue papers). How to draw shapes, color palette and material moodboard
- Case Study: Brief professor's portfolio review. Table Lamps: Artemide & Flos products
- Assignment 1: "The Table Lamp"

The students must acquire for this session:

- x1 black pen (Muji 0,5mm or similar);
- x1 notebook A4 (plain white, no lines, no graphics, no decoration);
- x5 felt pens ABT markers, colours: N95, N75, N25, 990, 243 (more if you like, very light colours are suggested rather than dark / intense ones);
- x2 A3 craft paper sheet for sketching (preferably a smooth paper rather than rough)
- x2 A3 white paper sheet for sketching (preferably a smooth paper rather than rough)
- x1 White Pencil and Sharpener

At midterm students will be requested to acquire the following:

- DIY pieces and standard components (depending on each student)
- x2 Pictures Frame, Ikea Frame, birch effect birch, 30x40 cm (<https://www.ikea.com/es/en/p/hovsta-frame-birch-effect-birch-60365761/>)

Total estimated cost: 60-100€ per student.

Materials can be acquired at:

- Papers and Markers: La Riva Papeles Especiales, Plaza de San Ildefonso, 4, 28004 Madrid (Madrid Subway: Tribunal Stop)
- Wood: Several stores in Madrid (calle Madera), or Maderas Agulló (more variety of timbers)
- See Excel in Additional Documentation with more materials suppliers in Madrid and Segovia.

Important:

- Students must bring their personal notebook to every session and review.
- Students must document their work from the first sessions taking pictures and videos.

Assignment 1: The Table Lamp - A3 Craft Paper Sketch (individual)

Students work individually on sketching a table lamp (craft paper, markers and pencils). The professor will assign a Table Lamp to each student. On a A3 craft paper sheet sketch the analysis of the lamp highlighting the functional and aesthetic features. Sketch views (elevations, sections, exploded views), details, joints, material finishes, and use the white pencil to represent the light beam on the craft paper.

Assignment 2: Table Lamp Blueprints - A3 White Paper Sketch (individual)

Students work individually on this assignment. They will have to sketch an exploded view of the lamp and side views of the main components. Real dimensions and joineries should be noted on the paper.

Important: for all sketching reviews students are requested to upload their progress 1 hour before the start of the next class on a Miro Board (a link will be provided). Professor will select some students to share their progress and to be commented on. All students participate in the class review and learn how to improve their work as well.

Readings (See Materials)

Sketching Practice. The professor will show the online tutorials for each sketching topic and students will practice reproducing the exercise seen on video:

Video: Lines (Youtube)

Video: Perspective (Youtube)

Video: Line Weight (Youtube)

Video: Shadows (Youtube)

Video: Shadows 2 (Youtube)

Video: Cubes (Youtube)

Video: Ellipses (Youtube)

Video: Intersection (Youtube)

Video: Intersection 2 (Youtube)

Video: Rounded Corners (Youtube)

Book Chapters: Sketching The Basics (BIS Publisher) (See Bibliography)

Book Chapters: Drawing on the Right Side of the Brain (See Bibliography)

Assignment 1 selected students review: students will have to upload on a Miro Board their progress 1 hour before the start of the next class. The professor will select some deliveries to comment on. All class participate in the review and learn from the given comments.

SESSIONS 4 - 6 (LIVE IN-PERSON)

SKETCHING PRACTICE

Students must upload their progress 1 hour before the start of the session on the class Miro board (link will be provided in advance).

All students work on Assignments 1&2, the professor will give further instructions on how to face the assignments.

As an additional practice, the professor might introduce new exercises based on the book "Drawing on the Right Side of the Brain" (See Materials).

- Selfportrait
- Portrait
- Your Hand

Book Chapters: Drawing on the Right Side of the Brain (pp. 34) (See Bibliography)

SESSIONS 7 - 9 (LIVE ONLINE)

This lecture will analyse different approaches to the relation Form & Function as seen by relevant designers and architects (Louis Sullivan, Frank Lloyd Wright, Antoni Gaudí, Philippe Starck, Ross Lovegrove, and the Shakers). We'll discuss the process of shape exploration used by product and industrial designers. Concepts as "Styling" and "Streamline" will be explained through relevant case studies.

Topics to be familiar with:

- Form & Function
- Rationalist VS Streamline Design (Raymond Loewy, Pininfarina, Giugiaro, Bertone, Tesla)
- Achille Castiglioni's Scissors

- Achille Castiglioni at MoMA
- Naoto Fukasawa and Jasper Morrison. Super Normal. Lars Muller Publisher.
- Abstract, Netflix Series
- Objectified, Gary Hustwit (<https://vimeo.com/ondemand/objectified/>)
- Dieter Rams Documentary, Gary Hustwit (<https://vimeo.com/ondemand/ramsfilm>)
- Power of Ten, Charles & Ray Eames for IBM
- Miguel Milá, Santa Cole (<https://www.santacole.com/es/documental-de-miguel-mila/>)

All students will have to be familiar with the above content to participate in the next class debate.

Sketches Review

The professor will select 5 students to share their sketching progress. Comments and corrections will serve the whole class. Each student is required to pay attention to the corrections given and be responsible to define where the individual work needs to be improved. All students will use the Miro Board to submit their progress of Assignments 1&2 before the start of the session. Each individual will have to scan the sketches (white background, no shadows, no vignette effect) and upload them to the dedicated thread of the online forum. All sketches must be uploaded 1 hour before the Session is scheduled.

Sketching Practice

The professor will give instructions during class (focus on human proportions and ergonomic). Side views and blueprint examples will be shown.

Follows a sketching exercise based on the book "Drawing on the Right Side of the Brain" (See Materials).

Assignment 3: Author Case Study - 15 Pages Horizontal Ppt (individual)

Professor introduces to AS3. Students work individually on this assignment, researching the life and work of the table lamp designer (life and works, materials and manufacturing process, historical context, impact of the design etc.), They will prepare a Reduced Pecha Kucha format (15 horizontal slides, 15 seconds each) deck to present on the Midterm Review Day. They will present this deck acting as if they were the researched author "Hi, I am Jean Prouvé and this is my story".

Pecha Kucha Tips (See Materials).

The professor will introduce a guideline and share some tips to help the students prepare the perfect storytelling for Assignment 3 - Author's Case Study.

"La Clinica Swing Kickstarter" will be presented as an example.

Book Chapters: Drawing on the Right Side of the Brain (The Face / Vase Sketch (pp. 66); The Pablo Picasso's Igor Stravinskij upside down portrait (pp. 72); A table in perspective view (pp. 144-145); Goerge Orwell portrait (pp. 169); Mme Gautreau, Sargent, portrait (pp. 177) (See Bibliography)

Video: Brutalism (pechakucha.com)

Video: BAKOKO Pecha Kucha V.64 (Youtube)

Video: ECAL graduate Tomas Kral talks about his graduation project (Youtube)

Video: PechaKucha Night Richmond, Vol. 14 (Youtube)

Video: What makes a great PechaKucha (Youtube)

SESSIONS 10 - 12 (LIVE IN-PERSON)

SKETCHES REVIEW

Review AS1 & AS2

The professor will review the works of the selected students, and corrections and comments will serve the whole group. Students will get ready for the delivery next session.

GET READY FOR 1st MILESTONE

Assignment 1: The Table Lamp - A3 Craft Paper Sketch (individual).

Assignment 2: Table Lamp Blueprints - A3 White Paper Sketch (individual).

Professor will remind how the grading system for each assignment works, as a sum of 10 points based on the sketching method seen in class.

GET READY FOR THE OPEN DISCUSSION

All students must become familiar with the following topics to participate in the following class debate:

- Form & Function
- Rationalist VS Streamline Design (Raymond Loewy, Pininfarina, Giugiaro, Bertone, Tesla)
- Achille Castiglioni's Scissors
- Achille Castiglioni at MoMA
- Naoto Fukasawa and Jasper Morrison. Super Normal. Lars Muller Publisher.
- Abstract, Netflix Series
- Objectified, Gary Hustwit (<https://vimeo.com/ondemand/objectified/>)
- Dieter Rams Documentary, Gary Hustwit (<https://vimeo.com/ondemand/ramsfilm>)
- Power of Ten, Charles & Ray Eames for IBM
- Miguel Milá, Santa Cole (<https://www.santacole.com/es/documental-de-miguel-mila/>)

SESSIONS 13 - 15 (LIVE ONLINE)

1st MILESTONE - SKETCHING DELIVERY - Part 1 (Assignment 1)

This online session will require all students to properly scan Assignment 1 and upload it on a Miro board, a link provided by the professor. All drawings MUST be scanned (not pictured) with a professional resolution (no vignette effect, no shadows, perpendicular margins etc.) or by using a Scan mobile App (Dropbox etc.)

Professor will check if all entries are correctly uploaded and will grade the deliveries after class.

OPEN DISCUSSION

The second part will be an open discussion on the topics seen in class. The professor will ask random students to talk about the following topics:

- Form & Function
- Rationalist VS Streamline Design (Raymond Loewy, Pininfarina, Giugiaro, Bertone, Tesla)
- Achille Castiglioni's Scissors
- Achille Castiglioni at MoMA
- Naoto Fukasawa and Jasper Morrison. Super Normal. Lars Muller Publisher.
- Abstract, Netflix Series
- Objectified, Gary Hustwit (<https://vimeo.com/ondemand/objectified/>)
- Dieter Rams Documentary, Gary Hustwit (<https://vimeo.com/ondemand/ramsfilm>)
- Power of Ten, Charles & Ray Eames for IBM
- Miguel Milá, Santa Cole (<https://www.santacole.com/es/documental-de-miguel-mila/>)

All students will have to be familiar with the above content to participate in the next class debate.

SESSIONS 16 - 18 (LIVE IN-PERSON)

1st MILESTONE - SKETCHING DELIVERY - Part 2 (Assignment 2)

This online session will require all students to properly scan Assignment 2 and upload it on a Miro board, link provided by the professor. All drawings MUST be scanned (not pictured) with a professional resolution (no vignette effect, no shadows, perpendicular margins etc.) or by using a Scan mobile App (Dropbox etc.)

Professor will check if all entries are correctly uploaded and will grade the deliveries after class.

The second part of the class will be for introducing to the next assignments.

NEXT ASSIGNMENTS

Groups & Final Lamp Selection

Groups of 3 students are now formed. Professor will choose which lamp of the three the group should work on.

Assignment 4: Cardboard Scale Model 1:1 (group)

Students work in groups on this assignment. They will have to reproduce the exact shape 1:1 of the table lamp using thin colored cardboard ("Cartulina" in Spanish). Professor will show examples from the last years and different mock-up techniques.

Assignment 5: DIY Table Lamp Model 1:1 (group)

"The farther humans go into deep space, the more important it will be to generate products and shelter with local materials, a practice called in-situ resource utilization. NASA Artemis Mission Guidelines, 2019." With this premise in mind, each group will make a replica of the lamp, this time using any available material. Try to avoid buying things, make do with what you have at home, and reuse things. The lamp must work and turn on.

- Case Study for Cardboard model: Clara von Zweigbergk
- Case Study: best practices from last year BIDS

The students will have to acquire the materials in advance and spend the rest of class working on the assignments.

IMPORTANT: Students must pay a visit at LUCIOLÉ store in Madrid and search for the components they need to buy in order to produce the assigned lamp:

LUCIOLÉ
C. de Hortaleza, 106, 28004 Madrid
<https://www.luciole.es>

SESSIONS 19 - 21 (LIVE ONLINE)

GETTING READY FOR PECHA KUCHA DELIVERY

The professor will show some of the Pecha Kechas examples from last year.

Secondly, the professor will ask students to share their insights for Assignment 3.

- Pecha Kucha: students will present their initial study of the selected author designer of the lamp, highlighting the most important facts of the author's career and professional milestones.
- Cardboard Model: students will also present which cardboard and technique they will source and use in order to manufacture the Assignment 4.

SESSIONS 22 - 24 (LIVE IN-PERSON)

PECHA KUCHA DELIVERY

2nd MILESTONE

Assignment 3: Author Case Study - 15 Pages Horizontal (individual)

The professor will call all students one by one to perform their presentation, feedbacks will follow. Students work individually on this assignment, researching the life and work of the table lamp designer (life and works, materials and manufacturing process, historical context, impact of the design etc.), They will prepare a REDUCED Pecha Kucha format (15 horizontal slides, 15 seconds each). The professor will grade after class.

SESSIONS 25 - 27 (LIVE ONLINE)

The professor will introduce the students to the next assignments.

- Photo session guidelines
- Design Template for picture layout
- Prints and Frames
- Printed examples of product booklets and catalogs

Assignment 6: Photo, Prints & Frames (group)

Following the professor's instructions, each group will learn how to take professional pictures at both the Cardboard and DIY models (Assignments 4&5). Vertical picture, perspective, shadow and background conditions are equal for all. Both pictures will have the same layout for all, using a template the professor will share in advance. Each group will print both pictures in A3 vertical format and frame them. for the Final Show. The frame must be the same for all students, this IKEA model is to be found: <https://www.ikea.com/es/en/p/hovsta-frame-birch-effect-birch-60365761/>

IMPORTANT: NO other wooden color, format, or mounting system will be accepted. The frame must be the Ikea one or any other brand which offers an identical size and look. The student will mount the two A3 prints inside the frame, which holds a mounting paper that you will keep (passpartout).

Assignment 7: Printed Booklet (group)

Each group will design a graphic layout (preferably in Adobe Indesign) and print a booklet (approx. 20 pages). You can use this book to tell the story of the whole process during all assignments, you can talk about the original lamp, the author, how you discovered the functions, materials, special features of the lamp, and how you managed to prototype it, the final pictures, etc. It needs to be a very aesthetic book "to sell" your work, as it was a catalog for a product.

- Case Study: photographs series by Thomas Demand, Apartamento Magazine.
- Case Study: Open Structure by Thomas Lomeé, Recession Design (See Materials).
- Introduction: DIY and standard components mock-up technique.
- Recession Design (See Materials).

Article: Recession Design (designboom.com)

Article: Recession Design (Open Structure)

SESSIONS 28 - 30 (LIVE IN-PERSON)

GETTING READY FOR 3rd MILESTONE - Part 1 - Assignment 4: Cardboard Scale Model 1:1 (group)

WORKS REVIEWS & HANDS-ON WORK

In this session, the professor will review the progress of AS4&5 and the rest of the students will work in the Fablab.

SESSIONS 31 - 33 (LIVE IN-PERSON)

3rd MILESTONE - Part 1 - Assignment 4: Cardboard Scale Model 1:1 (group)

All students will deliver their final cardboard model.

WORKS REVIEWS & HANDS-ON WORK

In this session, the professor will review the progress of AS4,5,6,7 and the rest of the students will work in the Fablab.

SESSIONS 34 - 36 (LIVE ONLINE)

WORKS REVIEWS & HANDS-ON WORK

In this session, the professor will review the progress of AS5,6,7 and the rest of the students will work in the Fablab. Case studies for prototyping and sampling will be shared.

SESSIONS 37 - 39 (LIVE IN-PERSON)

GETTING READY FOR FINAL DELIVERY

WORKS REVIEWS & HANDS-ON WORK

In this session, the professor will review the progress of AS5,6,7 and the rest of the students will work in the Fablab.

Photoshoot Day Getting Ready

The professor will explain how the next session photo session will take place and assign tasks to students.

Final Show Get Ready

This class will also cover the Final Show preparation. Groups will be assigned to different tasks (AS8).

SESSIONS 40 - 42 (LIVE IN-PERSON)

FINAL DELIVERY OF ASSIGNMENT 5 & PHOTOSHOOT DAY

In this session, students will bring their final DIY Model and the professor will lead the photoshoot of all the finalized pieces with the help of all students.

All groups are required to bring the final pieces to the MediaLab (Assignment 4: Cardboard Scale Model & Assignment 5: DIY Table Lamp Model) where the professor will organize the photo session.

SESSIONS 43 - 45 (LIVE IN-PERSON)

FINAL SHOW SETUP & PRESENTATIONS

All groups will participate in the Final Show setup. Students and professors will meet at Casa de La Moneda on the day of the final show and do a setup briefing. All students must bring all their assignments ready to be displayed, professors will make a selection of which works will be in the show. Students will set up the exhibition during the morning, at the end of the class the Final Show will be open and students will welcome external visitors.

Eventually, the professor will ask the 3 best Pecha Kucha Students to present their pitches again in front of the audience.

Bear in mind that the grade for Participation will also be used to evaluate the students' commitment to the Final Show setup.

4th MILESTONE - Final Delivery:

- Assignment 6: Photo, Prints & Frames (group)
- Assignment 7: Printed Booklet (group)
- Assignment 8: Final Presentation & Participation

BIBLIOGRAPHY

Compulsory

- Naoto Fukasawa and Jasper Morrison. (2007). *Super Normal*. 1st edition. Lars Muller Publisher. ISBN 9783037781067 (Printed)

null

Recommended

- Koos Eissen and Roselien Steur. *Sketching -The Basics*. BIS Publisher. ISBN 9789063692537 (Digital)

null

- Betty Edwards. *Drawing on the Right Side of the Brain*. ISBN 1585429201 (Digital)

null

EVALUATION CRITERIA

Students will be evaluated continuously over the course of the semester, taking into account attendance and student commitment and participation in class, especially during discussions and debate, as well as the completion of assignments and tasks as assigned per the syllabus.

At the conclusion of the semester, the final grade will be determined by the students' capacity to analyze, conceptualize and prototype products, integrating all the knowledge acquired during sessions. The result of this process of learning will be evaluated through the course assignments, and the final jury review. Special consideration will be made for students' commitment and engagement with the assignments and participation in the debates during each session, as well as their initiative and creativity in their personal research.

The final grade in the course will be weighted in the following breakdown:

1st MILESTONE

- 10% - Assignment 1: The Table Lamp - A2 Craft Paper Sketch (individual)
- 10% - Assignment 2: Table Lamp Blueprints - A2 White Paper Sketch (individual)

2nd MILESTONE

- 10% - Assignment 3: Author Case Study - 20 Pages Horizontal Ppt (individual)

3rd MILESTONE

- 10% - Assignment 4: Cardboard Scale Model 1:1 (group)
- 10% - Assignment 5: DIY Table Lamp Model 1:1 (group)

4th MILESTONE

- 10% - Assignment 6: Photo, Prints & Frames (group)
- 10% - Assignment 7: Printed Booklet (group)
- 30% - Assignment 8: Final Presentation & Participation

SKETCHING GRADING

For all sketching assignments, the following specific criteria will be used as a sum up to 10 points.

Points breakdown for Correct Use of:

1. Perspective
1. Volumes constructions
1. Sections lines and Outlines
1. Cleanness
1. Composition
1. Use of color
1. Dimensions
1. Arrows & Notes
1. Backgrounds
1. Details & Zooms

Criteria	Percentage	Comments
AS1	10 %	
AS2	10 %	
AS3	10 %	
AS4	10 %	
AS5	10 %	
AS6	10 %	
AS7	10 %	
AS8	30 %	

PROFESSOR BIO

Professor: **ANDREA CARUSO**

E-mail: acaruso@faculty.ie.edu

Andrea Caruso is co-founder of Ciszak Dalmas, a boutique-scale Architecture and Design Studio based in Madrid, working in the field of interior architecture and product design.

The multidisciplinary team works passionately intending to innovate, break the barriers and create disruptive concepts for small and big-scale firms, materializing ideas to be touched, felt, and shared. The studio works across a range of disciplines, including architecture, interior, product, furniture design, and art direction, using a holistic and experimental approach, and exploring the interconnections between traditional craftsmanship and new technologies.

They have undertaken projects of various nature in collaboration with Aesop, Bershka, Bosa, Bitossi, Camper, Loewe, Malababa, Max&Co., Muroexe, Saffron, and Zara among others. Side to the commercial works, their daily practice focuses on material experimentation and limited edition design.

The duo is also founder of La Clinica Design, a contemporary furniture, and object brand. They were awarded in 2019 with the First Prize for the Best Retail Design section by The New York Times Magazine.

In the academic field, they are associate professors at IE University and visiting at HEAD Geneva, Elisava and IED Madrid, holding lectures in an international framework, such as the Biennale di Architettura in Venice, Salone del Mobile in Milan, Experimenta Design in Lisbon and Design Ambassador in Hong Kong.

- 2022 Delta Award, Lighting Design Best Product of the Year by Adi-Fad Barcelona

- 2019 Best Retail Design of the Year, The New York Times Magazine
- 2016 First Prize, Best Packaging Design of the Year, Italian Design Council, Italian Embassy in Madrid
- 2018 Prize MD-i, Best Independent Designer of the Year, Madrid City Council
- 2010 First Prize for Young Talents, Injuve, Spanish Ministerio de Derechos Sociales

OTHER INFORMATION

OTHER INFORMATIONS

Office hours: Office hours will be held by appointment on Friday.

Contact details: acaruso@faculty.ie.edu

