



**APRIL 26 - APRIL 30, 2021** 

**VOLUME 5 / ISSUE 29** 



www.gelisim.edu.tr



# STUDENT LEADER PROGRAM

Student Leader Training Programs, which will last 18 days, are organized by Istanbul Gelisim University Health, Culture and Sports Department on 16.03.2021-27.05.2021. Courses based on the concept of Leadership, which is one of the most important concepts of today are given by expert faculty members in order to train future leaders. The training will continue on the zoom platform on Tuesdays and Thursdays between 21:00 and 22:10, for a total of 40 hours. Courses cover Leadership and Motivation, Stress and Crisis Management, Peer Relations, Sensitivity to Gender Equality, Effective Communication, Conflict Management, Management in Digital Transformation and Transformation, Group Leadership, Body Language, Attention and Memory, Healthy Nutrition in Leadership, Managing Future Technologies, Youth Psychology, Suggestion and Suggestion, Technology Addiction.



#### **AGENDA OF PERSONNEL**

#### **ACADEMIC**

As of 23.04.2021, **Ass. Prof. Dr. Yahya Can DURA** has been appointed as the Vice Dean of the Faculty of Economics, Administrative and Social Sciences .

Prof. Dr. Nail ÖZTAŞ has been appointed as the Head of the Commission,

#### **ADMINISTRATIVE**

As of 26.04.2021, **Bilal LUŞ** has been appointed to the Civil Defense Commission of our University as a Civil Defense Specialist.

As of 27.04.2021, **Gizem ÇAM** has been appointed as the School Secretary to the Directorate of the School of Foreign Languages,





TITLE ASSIGNED	NAME	SURNAME	FACULTY / SCHOOL OF APPOINTMENT	ASSIGNED DEPARTMENT	APPOINTMENT DATE
LECT.	SENA	TAŞ	IGUVS	ELECTRONIC TECHNOLOGIES	19.04.2021
LECT.	SELİM	AYKAÇ	IGUVS	AVIATION LOGISTIC	19.04.2021
LECT.	SİBEL	CANİTEZ	HSVS	AUTOPSY ASISTANSHIP	19.04.2021
LECT.	EZGİ	KESTEK	IGUVS	MECHATRONICS	19.04.2021
LECT.	İLKSEN	SARI O	HSVS	AUTOPSY ASISTANSHIP	19.04.2021
ASST. PROF. DR.	ÖZLEM	GÖNÜL	ASVS	GASTRONOMY AND CULINARY ARTS	19.04.2021
ASST. PROF. DR.	ANIL	ÇETİN	FD	CLINIC SCIENCES	27.04.2021
ASST. PROF. DR.	İMAD MUHAMMED	SALİH	FD	CLINIC SCIENCES	27.04.2021
ASST. PROF. DR.	MUHAMMET	BİRLİK	FD	CLINIC SCIENCES	27.04.2021

I sincerely congratulate all of our teachers who have been appointed and wish them success in their duties.

**Asst. Prof. Dr. Serdar Çöp** Secretary General

#### **UPDATES FROM IGU**

From Istanbul Gelisim Vocational School Mechatronics Program, Lect. İlker İnan's and Inst. Umut Uz's article titled "Renewable Energy Sources in Turkey's Energy Geopolitics" and consisting of 2 volumes, 14 chapters and 72 articles, has been published in the first volume of the renewable energy special issue of Yeni Türkiye Magazine, which was chaired by President Recep Tayyip Erdoğan.

ISSN: 1300-4174

From Istanbul Gelisim Vocational School, Head of Design Department Lecturer Mustafa Günay's article titled "Investigation of the Logo and Emblems of Çorum Province Governorships and District Governorships in the Context of Design Principles and Elements" was published in the internationally indexed refereed scientific Atlas Journal. Access link is below.

#### https://www.atlasjournal.net/Makaleler/2032979278\_6%20ID%20654.pdf

From Istanbul Gelisim Vocational School, Head of Design Department Lect. Mustafa Günay's abstract digital illustration named "KURTULUŞ" was selected and exhibited by the symposium exhibition jury in the international online group exhibition held within the scope of the 3rd International Social Sciences and Educational Sciences Symposium (USVES) organized between 10-11 April 2021. Access link is below.

https://kongre.akademikiletisim.com/files/usves3/usves3\_sergi\_katalog.pdf



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From Istanbul Gelisim Vocational School, Head of Design Department Lect. Mustafa Günay's abstract digital illustration work named "ÜTOPYA" was selected by the exhibition jury at the 1st National Eurasia Jury Group Exhibition held on April 23, 2021, and the work was included in the exhibition. Access link is below.

#### https://avrasyasergisi.avrasya.edu.tr/?page\_id=14

Istanbul Gelisim Vocational School, Head of Design Department Lect. Mustafa Günay participated in the international group exhibition organized by ArtWin Art Gallery between 15-30 April 2021 on the occasion of "World Art Day" with his digital illustration entitled "BAKIŞ". The work was selected by the jury and featured in the exhibition. Access link is below.

#### https://www.youtube.com/watch?v=V5\_0zdkOeMw

From Istanbul Gelisim Vocational School, Public Relations and Publicity Program Lect. Sevgi Kavut's article titled "Digital Identities in the Context of Blockchain and Artificial Intelligence" was published in the April 2021 issue of Selçuk İletişim Magazine. Access link is below.

#### https://dergipark.org.tr/tr/download/article-file/1523899

With her thesis titled "Verbs with the Same Completed and Unfinished Appearance in Modern Russian Language and Expressions of These Verbs in Turkish" written under the supervision of Prof. Bahar Güneş from Atatürk University Institue of Social Sciences, from Istanbul Gelisim Vocational School, Applied Russian and Translation Program Lect. Sevda Polat has been awarded with the title of doctor in the doctoral thesis defense examination held on 2 April 2021.



**BY A DOYEN** 

# **Finding Roots of Polynomials**

In this article, I would like to give an idea about a subject that may be of interest to the academic and administrative staff of Istanbul Gelişim University, including students. As will be remembered from the 2nd grade of high school  $\mathbb N$  natural numbers,  $\mathbb Z$  integers,  $\mathbb Q$  rational numbers,  $\mathbb R$  real numbers and  $\mathbb C$  complex numbers are called sets and these numbers and defined in terms of unknowns x, the set  $\mathbb C[x]=\{p(x)=a_0+a_1x+\cdots+a_nx^n\colon a_0,\ldots,a_n\in\mathbb C\ ve\ n\in\mathbb N\}$  is called the set of polynomials with complex coefficients. Similarly, the sets  $\mathbb N[x]$ ,  $\mathbb Z[x]$ ,  $\mathbb Q[x]$  and  $\mathbb R[x]$  can also be defined. As it can be easily seen, the inclusion relations  $\mathbb N\subset\mathbb Z\subset\mathbb Q\subset\mathbb R\subset\mathbb C$  and similarly  $\mathbb N[x]\subset\mathbb Z[x]\subset\mathbb Q[x]\subset\mathbb R[x]\subset\mathbb C[x]$  inclusion relations occur. A number  $x_0$  that realizes  $p(x_0)=0$  is called a root of the polynomial p(x). Throughout the history of mathematics, polynomials have always attracted the attention of researchers. For example in 1792, Gauss (Carl Friedrich Gauss 1777-1855) found that a n-th order polynomial with real coefficients had n-roots, some of which may be complex numbers, and in 1826 Abel (Niels Henririk Abel, 1802-1829) polynomials of degree greater than four showed that the roots cannot be calculated by algebraic methods and root extractions.

In this short note,we will Show that the roots of the equation  $x^2+ax+b=0$  can be calculated with the formulas  $x_1=\frac{-a-\sqrt{a^2-4b}}{2}$  and  $x_2=\frac{-a+\sqrt{a^2-4b}}{2}$ . We will also show that The roots of third-order  $P(x)=x^3+ax^2+bx+c=0$  equation can also be calculated with similar formulas. So let the roots of this last equation be  $x_1,x_2,x_3$  respectively. When it is  $x_k=y_k-\frac{a}{3}$ , (k=1,2,3), its clearly seen that the polynomial roots of the numbers  $y_1$ ,  $y_2$ ,  $y_3$  are  $Q(y)=P\left(y-\frac{a}{3}\right)=y^3+\left(b-\frac{a^2}{3}\right)y+c-\frac{ab}{3}+\frac{2a^3}{27}=y^3+py+q$  So, to find the roots of the polynomial P(x), it is sufficient to find the roots of the polynomial Q(y)  $y^3+py+q$ . Suppose a root of this last polynomial is  $y_1=\alpha+\beta$ . Thus to prove  $(\alpha+\beta)^3+p(\alpha+\beta)+q=\alpha^3+\beta^3+(3\alpha\beta+p)(\alpha+\beta)+q=0$  It is sufficient to provide the equations  $\alpha^3+\beta^3=-\frac{p^3}{27}$  (\*)



it is seen that the numbers  $\alpha^3$  and  $\beta^3$  are the roots of the equation  $X^2 + qX - \frac{p^3}{27} = 0$ .

So 
$$\alpha^3=-rac{q}{2}-\sqrt{rac{q^2}{4}+rac{p^3}{27}}$$
 and  $\beta^3=-rac{q}{2}+\sqrt{rac{q^2}{4}+rac{p^3}{27}}$ , or equivalently

$$y_1 = \sqrt[3]{-\frac{q}{2} - \sqrt{\frac{q^2}{4} + \frac{p^3}{27}}} + \sqrt[3]{-\frac{q}{2} + \sqrt{\frac{q^2}{4} + \frac{p^3}{27}}}$$

obtained. Being from the equation of  $x^3-1=(x-1)(x^2+x+1)$  the equation of  $x^2+x+1=0$  and its roots  $w=-\frac{1}{2}+i\frac{\sqrt{3}}{2}$  and  $\overline{w}=-\frac{1}{2}-i\frac{\sqrt{3}}{2}$  are called the complex roots of the unit. If it's noted that  $(\alpha w,\beta\overline{w})$  and  $(\alpha\overline{w},\beta w)$  pairs also provide the (\*) equations provided by  $(\alpha,\beta)$ . Therefore the numbers  $y_1=\alpha+\beta,y_2=\alpha w+\beta\overline{w},y_3=\alpha\overline{w}+\beta w$  are all roots of the equation  $y^3+py+q=0$ .

The number  $\delta=\frac{q^2}{4}+\frac{p^3}{27}$  is called the discriminant of the equation  $y^3+py+q=0$ . If  $\delta>0$ , then both  $\alpha$  and  $\beta$  are real and thus  $y_1$  is real,  $y_2$  ve  $y_3$  are conjugate complex numbers, if  $\delta<0$  the numbers  $\alpha$  and  $\beta$  are conjugate complex numbers, so that each  $y_1,y_2$  ve  $y_3$  number is a conjugate complex number. It can easily be shown to be true.

Readers interested in finding the roots of fourth order polynomials can check the references.

#### References

N. Çalışkan, "Roots of algebraic equations", Mathematics World, 4 (1994), No. 3, 9-13. Yusuf Avcı and Nurettin Ergun, "Mathematics World", 6 (1996) No.1, 19-21.

Prof. Dr. Yusuf Avci

Lecturer, the Faculty of Engineering and Architecture



#### "This decision has no binding effect"

**APRIL 26** 

2021



Saying that the 43rd President of the United States of America, Joe Biden's describing the events of 1915 as "genocide" in the official language for the first time in the country's history caused scandal, the Sociologist and International Relations Specialist Dr. Bahlul Aliyev continued, "This decision has only a political purpose. "It has no legal binding effect."

"ARMENIAN REVOLT WAS DIRECTED BY RUSSIA AND FRANCE"

Evaluating the background of the 1915 events, Dr. Professor Bahlul Aliyev from Istanbul Gelisim University said, "When we look back on history, we see a great Armenian revolt led by Russia and France. For some reason, the memory of

more than 500 thousand Anatolian people who were cremated, buried alive, killed by various tortures and impaled as a result of these riots is ignored while the temporary deportation of the Armenians who committed this brutality creates an agenda built with fake history software."

You can visit www.gelisim.edu.tr to see the detailed news.

# Telerehab for patients during pandemic

APRIL 27

2021



Expressing that serious restrictions were imposed on physical therapy protocols to control the spread of virus during the pandemic, physiotherapist Çağıl Ertürk says that telemedicine and telerehab applications are gaining popularity again and indicates "Telerehab provides convenience for patients who have coronavirus and various movement disorders."

Stating that the COVID-19 epidemic has increased the use of telemedicine, physiotherapist Lecturer from Istanbul Gelişim University Faculty of Health Sciences, Çağıl Ertürk says, "In this period, one of the mechanisms of providing physical therapy is telemedicine. Telerehabilitation or telerehab is a technological audio-visual system that is especially used to serve patients

with coronavirus to improve their lung functions."

You can visit **www.gelisim.edu.tr** to see the detailed news.



#### Research: The Elderly are more helpful

**APRIL 28** 

2021



According to a study conducted with two groups aged 18-36 and 55-85 in the UK, the elderly were found to be more empathetic, participative and helpful compared to young people.

Evaluating the research which reveals that the elderly tend to work and labor more for others without any benefit, Gerentologist Sıla Ayan from Istanbul Gelisim University Faculty of Health Sciences says, "In this research, the helping behavior that changes with aging is defined as helping a person take steps and take actions rather than a financial help. The study conducted with 95 adults aged 18 through 36 and 92 adults aged 55 through 85 has shown that the latter group is more empathetic, participative, and helpful than the

former. The research reveals important data on elderly people's participation in social services and their benevolence attitudes."

You can visit www.gelisim.edu.tr to see the detailed news.

#### "Full closure will further increase depression in children and adolescents"

**APRIL 29** 

2021



Child and Adolescent Psychiatry Specialist in Istanbul Gelisim University Psychology Department Assoc. Prof. Canan Tanıdır indicates that children and adolescents have remarkably been affected by the pandemic. She expresses her concerns by saying there is a great increase in the frequency of depression, especially in adolescents. Moreover, the depression in children and adolescents will become more intense in the period of complete closure.

Stating that the admission to clinics has increased with the increase of depression seen in children and adolescents in the pandemic, Dr. Canan Tanıdır says, "Children experience the psychological distress of being at home all the time and not being able to socialize. They experience more depression.

Some of them are very anxious and their obsessions have increased. Especially because of the high death risk in people with any chronic illness from the virus, there are many children who apply with the concern of 'What if something happens to my parents?' At first, there was perhaps an uncertainty, but the longer the process lasts, the less hope they have left. Children and young people now apply to the clinic with too many problems" and she underlines that they sometimes have to apply medication for young people.

You can visit **www.gelisim.edu.tr** to see the detailed news.





"Regenerate by eating two meals a day"

**APRIL 30** 

2021



Quality Life Specialist Assoc. Dr. Haluk Saçaklı says, "The full closure lasting seventeen days has begun. It is possible to regenerate by fasting or eating two main meals during this period."

Stating that the body's immune mechanism triggers the formation of white blood cells after 3 days of fasting or when eating two main meals, Assoc. Dr. Haluk Saçaklı from Istanbul Gelisim University says, "When the human body is hungry, it destroys the unnecessary particles in weak and diseased cells. Our body renews our entire immune system. Fasting or eating 2 main meals a day appears to be a regeneration program."

You can visit **www.gelisim.edu.tr** to see the detailed news.







# ABOUT NEW CORONAVIRUS



All necessary measures are taken for the **coronavirus** revealed in Turkey and the World at **Istanbul Gelisim University. Things to know about coronavirus are as follows:** 

## What are the new coronavirus symptoms?

- The most common symptoms are fever, cough and respiratory distress.
- In severe cases, pneumonia, severe respiratory failure, kidney failure and death may occur
- Incubation period is between 2 and 14 days.

#### How is the virus transmitted?

It can be transmitted by the contact of the droplets caused by **coughing and sneezing** with the contact of the **mouth**, **nose and eyes** of other individuals in certain environment and by touching the surfaces where the droplets adhere and taking hands **into the mouth**, **nose or eyes**.

# What to do to be protected from the virus?

- When coughing or sneezing, the mouth and nose should be covered with a disposable tissue, if there is no handkerchief, the mouth should be closed with the upper sleeve or elbow, not with the palms.
- Handshaking and hugging should be avoided.
- Mouth, nose and eyes should not be touched with dirty hands.
- Hands must be washed for at least 20 seconds in accordance with the Handwashing Instructions found in the toilets. In the absence of water and soap, alcohol-containing hand antiseptics should be used. Cologne of 70-80 degrees also serve as disinfectants.
- Offices and classrooms must be ventilated hourly.
- Places frequently used by many people such as common areas and door handles should be disinfected every 2 hours.
- Hands must be washed after using public transportation.
- Because the virus progresses faster in people with low immune system; a balanced and healthy diet is required. Foods must be washed thoroughly before consumption.

#### What to do if there are symptoms?

- If you have come from countries with infections in the past 14 days, apply to the nearest healthcare facility by wearing a surgical mask.
- If you are coughing, have a fever and have difficulty at breathing, apply to the nearest healthcare facility by wearing a surgical mask.
- Always wear your mask when you are in the same room with a person who is recommended insulation at home.

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# PROTECTION AGAINST VIRUS IS IN OUR HANDS





THE MOUTH AND NOSE SHOULD BE CLOSED WITH PAPER TOWEL DURING COUGHING AND SNEEZE. IF YOU DO NOT HAVE ANY WIPE, THE INSIDE OF THE ELBOW SHOULD BE USED.



CLOSE CONTACT SHOULD AVOID LIKE HANDSHAKE AND HUGGING.



IT SHOULD BE STAYED AWAY FROM CROWDED ENVIRONMENTS.



DO NOT TOUCH THE MOUTH, NOSE AND EYES WITH DIRTY HANDS.



HANDS MUST BE WASHED WITH WATER AND NORMAL SOAP FOR AT LEAST 20 SECONDS.



ALCOHOL CONTENT HAND ANTISEPTICS SHOULD BE USED IN CASE OF THERE IS NO WATER AND SOAP.

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For Detailed Information, Please Read QR Code.



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7.05.2021	15:00	Talk	Translator-Experience Sharing	Google Meet: https://meet.google.com/ehj-ycvv- vyo	It will be held with the participation of Merve Ay Karakuş	Directorate of Vocational School / Applied Russian Translation Program
7.05.2021	17:30	Seminar	Strategies Workshop on Anxiety Coping during the Pandemic	Google Meet: https://meet.google.com/xat-mzht- vhb	It will be held with the participation of Lect. Selin Kalabaş	Department of Health, Culture and Sports / Social Service Club
8.05.2021	20:30	Seminar	Occupational Therapy Interventions in Dependent Individuals	Instagram: @iguergoterapi	It will be held with the participation of Exp. Occupational therapist Yasin Tekeci	Department of Health, Culture and Sports / IGU Occupational Therapy and Social Rehabilitation Club
8.05.2021	20:30	Festival / Fun	FACIAL YOGA WITH PINAR DEVECI	Instagram: @iguyoga	It will be held with the participation of Pınar Deveci	Department of Health, Culture and Sports / IGU Yoga Club
9.05.2021	14:00	Talk	The Impact of Overseas Business Discipline and Pandemic Process on Business Life in the Software Industry	Google Meet: https://meet.google.com/mio-kszq- mqp	It will be held with the participation of Cem Sağlam	Directorate of Vocational School / Computer Programming Program
9.05.2021	20:30	Festival / Fun	YOGA WITH CEREN SAVACI	Instagram: @iguyoga	It will be held with the participation of Ceren Savacı	Department of Health, Culture and Sports / IGU Yoga Club

<sup>\*</sup> Events are held online

<sup>\*</sup> Applications for attendance are submitted to relevat units









