Furkan Semih Dündar

Curriculum Vitae

Research Interests

Physics

- **Foundations of Physics**.
- **Interpretations of Quantum Mechanics**.
- **Wolfram Model**.
- **Shape Dynamics**.

Philosophy of Physics

- **Monads**.
- **Space**.
- **Time**.
- **Motion**.

Mathematics

- **Differential Geometry**.

Work

2026–Present	**Associate Professor**, *Amasya University*.
2025–Present	**Affiliate Researcher**, *Wolfram Institute*.
2025	**Associate Professor**, *ÜAK*.
2024–2026	**Assistant Professor**, *Sakarya University*.
2019–2026	**Assistant Professor**, *Amasya University*.
2016–2018	**Research Assistant**, *Boğaziçi University*.

Education

2016–2018	**PhD. in Physics**, *Boğaziçi University*.
2012–2014	**MSc. in Physics**, *Middle East Technical University*.
2007–2012	**BS. in Physics**, *Bilkent University*.

PhD. Thesis

Title	*Quantum Phenomena and Shape Dynamics*

✉ *f.semih.dundar@yandex.com* • *fsemih.org*

Advisor Metin Arık and Levent Akant

Master Thesis

Title *The Firewall Paradox*

Advisor Bayram Tekin

Awards and Honors

2015–2018 TÜBİTAK (PhD.) Scholarship

2012–2014 TÜBİTAK (MSc.) Scholarship

2012 Bilkent University, #1 Ranking in Graduation from the Physics Department

2012 Bilkent University, High Honor Degree

2007–2012 Bilkent University, Full Scholarship

2007–2012 TÜBİTAK (BS.) Scholarship

Referee for

- Classical and Quantum Gravity
- Modern Physics Letters A
- Mathematical Methods in the Applied Sciences
- International Journal of Theoretical Physics
- Fundamental Journal of Mathematics and Applications
- Communications in Advanced Mathematical Sciences
- Karamanoglu Mehmetbey University Journal of Engineering and Natural Sciences
- Journal of Smart Systems Research
- Sakarya University Journal of Science
- Bilecik Seyh Edebali University Journal of Science

Books

- Furkan Semih Dündar. *Kuantum 101*. (Popular physics book in Turkish. The English translation of the title is "Quantum 101") Say Yayınları. (December 12, 2025). ISBN: 9786050212198
- Furkan Semih Dündar. *Kuantum Görelilik Kütleçekimi: Yeni fiziğin püf noktaları*. (Popular physics book in Turkish. The English translation of the title is "Quantum Relativity Gravitation") Say Yayınları. (November 4, 2020). ISBN: 9786050208092
- Furkan Semih Dündar. *The Firewall Paradox: What is wrong with quantum gravity*. Lap Lambert Academic Publishing (December 20, 2016). ISBN: 9783330021754

Physics Olympiads

I served as an instructor to Turkish Physics Olympiads Team in the following terms:

- 2020 Winter
- 2020 Summer
- 2021 Winter
- 2021 Summer
- 2022 Winter
- 2022 Summer
- 2023 Winter
- 2023 Summer
- 2024 Winter

Contributions to the Open Source World

GitHub page: `https://github.com/fsdundar`.

2023 **16 Mathematica Videos for Physics (In Turkish) Published on** `https://www.youtube.com/@enormteknoloji`, *License: CC BY-SA 4.0*.

2022–2023 **Team Lead for Qiskit Documentation Localization Project**.

2019–2023 **Proofreader for Qiskit Documentation Localization Project**.

Scientific Projects

1. Furkan Semih Dündar (Yürütücü/PI). "Wolfram Model kapsamında çeşitliliğin rolünün araştırılması" (en: Investigation of the role of variety in the context of Wolfram Model). TÜBİTAK 1002-A project. Project Number: 122F297. November 2022–November 2023
2. Furkan Semih Dündar (Araştırmacı/Researcher) "Cosmological models and gravitational objects in modified theories of gravity" Boğaziçi University BAP project. Project Number: 11643. May 2016–May 2019.

Publications

1. Talha Zafer, **Furkan Semih Dündar**, Bülent Nafi Örnek. *Modelling a class of functions via freeform lens design.* Optik. Vol. 352, 172829. (2026)
2. **Furkan Semih Dündar**, Ali Serdar Arıkan. *Two parameter deformed Dirac oscillator in 3-Minkowski space-time*. International Journal of Theoretical Physics. Vol. 64, Issue 9, pp. 248. (2025)
3. **Furkan Semih Dündar**, Özgür Kelekçi, Gülhan Ayar. *A physical classification of Killing magnetic fields in Thurston geometries*. Mathematical Methods in the Applied Sciences. Vol. 48, Issue 4, pp. 5016–5023. (2025)
4. **Furkan Semih Dündar**. *Parabolic Numbers: A New Perspective*. Journal of New Theory. Issue 49, pp. 7–15. (2024)
5. **Furkan Semih Dündar**. *Modelling Real Valued Functions via Optical Lenses*.

Journal of Engineering Technology and Applied Sciences. Vol. 9, Issue 2, pp. 63–70. (2024)

6. **Furkan Semih Dündar**. *A Case Study for Leibnizian Ideas in Wolfram Model*. Foundations of Physics. Vol. 54, Article number 43. (2024)
7. Özgür Kelekçi, **Furkan Semih Dündar**, Gülhan Ayar. *Classification of Killing magnetic curves in* $\mathbb{H}^3$. International Journal of Geometric Methods in Modern Physics. Vol. 20, Issue 14. (2023)
8. **Furkan Semih Dündar**. *A Use of Variety as a Law of the Universe*. Complex Systems. Vol. 31, Issue 2, pp. 247–260. (2022)
9. **Furkan Semih Dündar**. *A Use of Elliptic Complex Numbers in Newtonian Gravity*. Advances in Applied Clifford Algebras. Vol. 32, 20 (2022)
10. **Furkan Semih Dündar** and Gülhan Ayar. *Contact Hamiltonian Description of 1D Frictional Systems*. Communications in Advanced Mathematical Sciences. Vol. 4, Issue 2, pp. 100–107. (2021)
11. **Furkan Semih Dündar**. *Qubit Representation of Motion on the 2D Plane*. Karamanoglu Mehmetbey University Journal of Engineering and Natural Sciences. Vol. 3, Issue 1, pp. 1–6. (2021)
12. **Furkan Semih Dündar**. *Contact Hamiltonian Description of Systems with Exponentially Decreasing Force and Friction that is Quadratic in Velocity*. Fundamental Journal of Mathematics and Applications. Vol. 3, Issue 1, pp. 29–32. (2020)
13. Kahraman Esen Özen, **Furkan Semih Dündar**, Murat Tosun. *An Alternative Approach to Jerk in Motion Along a Space Curve with Applications*. Journal of Theoretical and Applied Mechanics. Vol. 57, Issue 2, pp. 435–444. (2019)
14. **Furkan Semih Dündar** and Metin Arık. *On the Non-Existence of Unbounded Discrete Space-Time*. Mathematical Advances in Pure and Applied Sciences. Vol. 1, Issue 2, pp. 52–55. (2018)
15. **Furkan Semih Dündar** and Metin Arık. *Bohmian Mechanics made Machian.* The Online Journal of Science and Technology. Vol. 8(3) p. 26 2018
16. **Furkan Semih Dündar** and Metin Arık. *Bohmian Field Theory on a Shape Dynamics Background and Unruh Effect*. Annals of Physics. Vol. 392, pp. 157–164. (2018) `arXiv:1706.05890`.
17. **Furkan Semih Dündar**, Soley Ersoy, Nuno T. Sá Pereira. *Bobillier formula for the elliptical harmonic motion*. An. St. Univ. Ovidius Constanta, Ser. Mat. Vol. 26. Issue 1, pp. 103–110. (2018)
18. **Furkan Semih Dündar** and Kamal Hajian. *Quantum Jump from Singularity to Outside of Black Hole*. JHEP 02 (2016) 175. `arXiv:1511.03572`

Conference Organization

July 2024 **Organizer for: 11th International Congress on Fundamental and Applied Sciences**, *Fatih Sultan Mehmet Vakıf University*, İstanbul.

June 2023 **Organizer for: 10th International Congress on Fundamental and Applied Sciences**, *Fatih Sultan Mehmet Vakıf University*, İstanbul.

Workshops and Conferences

Jan. 2025 **Wolfram Winter School 2025**, *Wolfram Institute*, Online, "A suggestive quantum theory for cyclic character strings".

Sept. 2024 **36. Ulusal Matematik Sempozyumu**, *Amasya University*, Amasya, "Leibniz'in Monadlarının Wolfram Model ile Temsili".

June 2023 **BAYÖYO 2023: Bilim Akademisi - Sabancı Üniversitesi - İstanbul Teknik Üniversitesi Yapay Öğrenme Yaz Okulu**, *Sabancı University*, İstanbul.

June 2023 **10th International Congress on Fundamental and Applied Sciences**, *Fatih Sultan Mehmet Vakıf University*, İstanbul, "Modelling Real Valued Functions via Optical Lenses".

June 2022 **9th International Congress on Fundamental and Applied Sciences**, *Fatih Sultan Mehmet Vakıf University*, İstanbul, "Maximal Variety Leibnizian Strings for Large N".

Dec. 2020 **International Marmara Sciences Congress IMASCON 2020 - Autumn**, Kocaeli, "Invitation to Using n-Scale Calculus in Physics and Future Opportunities".

Aug. 2020 **9th International Eurasian Confrence on Mathematical Sciences and Applications**, *International Balkan University*, Skopje, "Covid-19 and the Fibonacci Numbers".

June 2018 **5th International Congress on Fundamental and Applied Sciences**, *International Balkan University*, Skopje, "Massive Scalar Field Theory on Discrete n-Scales".

May 2018 **Mathematical Physics Days**, *Koç University*, İstanbul, "Gravitational Collapse of Thin Shell of Dust in Shape Dynamics".

May 2018 **Recent Trends in String Theory and Related Topics**, *IPM*, Tehran, "Gravitational Collapse of Thin Shell of Dust in Shape Dynamics".

Apr. 2018 **13. Ankara Matematik Günleri**, *TOBB ETÜ*, Ankara.

Aug. 2017 **6^{th} International Eurasian Conference on Mathematical Sciences and Applications**, Budapest, Hungary, "The Theory of n-Scales".

Aug. 2017 **Astrofiziksel Diskler Yazokulu**, *Boğaziçi University*, İstanbul.

July 2017 **Adım Physics Days VI**, *Balıkesir University*, Balıkesir, "An invitation to shape dynamics".

May 2017 **Recent Trends in String Theory and Related Topics**, *IPM*, Tehran.

July. 2016 **International Science and Technology Conference**, Wien.

Dec. 2015 **International Conference on Quality in Higher Education**, *Sakarya University*, Sakarya.

Sept. 2015 **International Science and Technology Conference**, St. Petersburg.

Dec. 2014 **X Avogadro Meeting on Strings, Supergravity and Gauge Theories**, *Scuola Normale Superiore*, Pisa.

April 2014 **13th Workshop on Quantization, Dualities and Integrable Systems**, *Koç University*, İstanbul.

Sept. 2013 **Erdal İnönü Group Theory Summer School**, *Boğaziçi University and Bilim Akademisi*, İstanbul.

July 2011 **Physics of Stars**, *ITAP*, Marmaris.

Conference Proceedings

1. Furkan Semih Dündar. *Leibniz'in Monadlarının Wolfram Model ile Temsili*. 36. Ulusal Matematik Sempozyumu. Amasya, Turkey, September 9–12, 2024. (Abstract appeared in the proceedings book)
2. Furkan Semih Dündar. *Modelling Real Valued Functions via Optical Lenses*. 10th International Congress on Fundamental and Applied Sciences. İstanbul, Turkey, June 6–8, 2023. (Abstract appeared in the proceedings book)
3. Furkan Semih Dündar. *Maximal variety Leibnizian strings for large N*. 9th International Congress on Fundamental and Applied Sciences. İstanbul, Turkey, June 28–30, 2022. (Extended abstract appeared in the proceedings book)
4. Furkan Semih Dündar. *Invitation to Using n-Scale Calculus in Physics and Future Opportunities*. International Marmara Sciences Congress IMASCON 2020 - Autumn. Kocaeli, Turkey. December 4–5 2020. (Fulltext appeared in the proceedings book)
5. Furkan Semih Dündar. *Covid-19 and the Fibonacci Numbers*. 9th International Eurasian Confrence on Mathematical Sciences and Applications. Skopje, North Macedonia. August 25–28 2020. (Appeared in the abstract book)
6. Furkan Semih Dündar. *The Theory of n-Scales*. AIP Conference Proceedings, vol. 1926, p. 020014, 2018. doi: 10.1063/1.5020463.
7. Furkan Semih Dündar and Barış Tamer Tonguç. *Quantum Shape Kinematics*. The Proceeding Book of International Science and Technology Conference 2016. Page 855. November 18, 2016. `arXiv:1511.05840`

Popular Science Publications

1. Furkan Semih Dündar. *3 Cisim Problemi'ndeki Fizik* (en: The Physics in the "3 Body Problem"), Gazete Bilim, March 2024

2. Furkan Semih Dündar. *Kuantum mekaniğinin hücresel otomat yorumu* (en: Cellular automaton interpretation of quantum mechanics), Gazete Bilim, February 2024.
3. Furkan Semih Dündar. *İkinci kuantum devrimi ve gelecek* (en: Second quantum revolution and future), Gazete Bilim, June 2023.
4. Furkan Semih Dündar. *Dikey ya da yatay bilim: İşte bütün mesela bu!* (en: Vertical or horizontal science: That is the question!), Gazete Bilim, April 2023.
5. Furkan Semih Dündar. *Fizikte hücresel otomatlar hakkında* (en: About cellular automata in physics), Bilim ve Ütopya, January 2023.
6. Furkan Semih Dündar. *Süperdeterminizm* (en: Superdeterminism), Bilim ve Ütopya, December 2022.
7. Furkan Semih Dündar. *Hayalimdeki bilim insanı* (en: My dream scientist), Bilim ve Ütopya, November 2022.
8. Furkan Semih Dündar. *Azami çeşitli evren: Bir oyuncak model* (en: Maximal variety universe: A toy model), Bilim ve Ütopya, October 2022.
9. Furkan Semih Dündar. *Kuantum mekaniğinin yorumları* (en: Interpretations of quantum mechanics), Bilim ve Ütopya, September 2022.
10. Furkan Semih Dündar. *Zamanın yönü problemi* (en: The arrow of time problem), Bilim ve Ütopya, July 2022.
11. Furkan Semih Dündar. *Gökadamızın merkezindeki karadelik objektiflere yakalandı!* (en: The black hole at the center of our galaxy has been caught on camera!), Bilim ve Ütopya, June 2022.
12. Furkan Semih Dündar. *Yapay zeka çağında matematik eğitimi* (en: Mathematics education in the age of AI), Bilim ve Ütopya, May 2022.
13. Furkan Semih Dündar. *Wolfram Model* (en: Wolfram Model), Bilim ve Ütopya, April 2022.
14. Furkan Semih Dündar. *Burçin Ünlü'nün "Büyük buluşma: Fizik ve sanat" yazısı üzerine* (en: On Burçin Ünlü's "Büyük buluşma: Fizik ve sanat"), Bilim ve Ütopya Portalı, September 2020.
15. Furkan Semih Dündar. *Hossenfelder'in "Lost in Math"i üzerine* (en: On Hossenfelder's "Lost in Math"), Bilim ve Ütopya Portalı, March 2020.
16. Furkan Semih Dündar. *Kuantum fotokopiye izin yok* (en: Quantum Xeroxing is not allowed), QTurkey, February 2020.
17. Furkan Semih Dündar. *Kuantum bilgi ve kuantum ışınlanma* (en: Quantum information and quantum teleportation), Bilim ve Ütopya, February 2020.
18. Furkan Semih Dündar. *Kurumsal fizik mümkün. Peki ya sonrası?* (en: Corporate physics is possible. What's next?), Bilim ve Ütopya Portalı, February 2020.
19. Furkan Semih Dündar. *Rovelli'nin yedi kısa dersi hakkında* (en: On Rovelli's seven brief lessons), Bilim ve Ütopya Portalı, November 2019.
20. Furkan Semih Dündar. *Kurumsal fizik mümkün mü?* (en: Is corporate physics possible?), Bilim ve Ütopya Portalı, August 2019.
21. Furkan Semih Dündar. *Atwood Makinesi'nin anlamı* (en: The meaning of Atwood's Machine), Bilim ve Ütopya Portalı, August 2019.

22. Furkan Semih Dündar. *Evrende tüm yönler eşit midir?* (en: Are all the directions in the universe equal?), Bilim ve Ütopya Portalı, July 2019.
23. Furkan Semih Dündar. *Schrödinger'in Kedisi'nin kökeni* (en: The origin of Schrödinger's Cat), Bilim ve Ütopya Portalı, July 2019
24. Furkan Semih Dündar. *Karanlık madde, karanlık enerji ve modifiye kütleçekim kuramları* (en: Dark matter, dark energy and modified gravity theories). Bilim ve Ütopya Portalı. June 2019.
25. Furkan Semih Dündar. *Fizik için özgür yazılımlar* (en: Free softwares for physics). Bilim ve Ütopya Portalı. May 2019.
26. Furkan Semih Dündar. *Kara deliğin gölgesi üzerine kısaca* (en: Briefly on the shadow of the black hole). Bilim ve Ütopya Portalı. April 2019.
27. Furkan Semih Dündar. *Bilimsel ilerleme zinciri ve güven* (en: The chain of scientific advancement and trust). Bilim ve Ütopya Portalı. April 2019.
28. Furkan Semih Dündar. *Kopenhag yorumuna bir alternatif: Bohm mekaniği* (en: An alternative to Kopenhagen interpretation: Bohmian mechanics). Bilim ve Ütopya Portalı. March 2019.
29. Furkan Semih Dündar. *Einstein'dan Barbour'a: Şekil dinamiğinin kısa tarihi* (en: From Einstein to Barbour: A brief history of shape dynamics). Bilim ve Ütopya. March 2019.
30. Furkan Semih Dündar. *Kara delik nedir? Gerçek midir?* (en: What is a black hole? Is it real?). Bilim ve Ütopya Portalı. February 2019.
31. Furkan Semih Dündar. *Postmodern bilime tutunabilmek* (en: Being able to hold onto postmodern science). Bilim ve Ütopya Portalı. December, 2018.
32. Furkan Semih Dündar. *Sınırsız ayrık uzay-zamanın yokluğu üzerine* (en: On the nonexistence of unbounded discrete space-time). Bilim ve Ütopya Portalı. November 2018.
33. Furkan Semih Dündar and Sadık Şamilov. *Kuantum kütleçekimine giriş* (en: Introduction to quantum gravity). Bilim ve Ütopya. November 2018.
34. Furkan Semih Dündar. *Riemann Hipotezi* (en: Riemann Hypothesis). Bilim ve Ütopya Portalı. October 2018.
35. Furkan Semih Dündar. *Şekil Dinamiğine Giriş* (en: Introduction to Shape Dynamics). Bilim Fili. June 2018. https://bilimfili.com/sekil-dinamigine-giris/
36. Furkan Semih Dündar. *Mach İlkesi Nedir? (en: What is Mach's Principle)*. BilimFili. June 2018. https://bilimfili.com/mach-ilkesi-nedir/
37. Furkan Semih Dündar. *Stephen Hawking ve Kara Delikler (en: Stephen Hawking and Black Holes)*. Bilim ve Ütopya. April 2018.
38. Furkan Semih Dündar. *Mutlak Uzak (en: Absolute Space)*. Bilim ve Teknik. May 2016.
39. Furkan Semih Dündar. *Kütleçekim Dalgaları İlk Kez Gözlemlendi! (en: Gravitational waves has first been observed)*. Bilim ve Teknik, March 2016.
40. Furkan Semih Dündar. *İzafiyet kuramı ve kara delikler (en: Relativity and Black Holes)*. SAÜ Aktüel 2015.
41. Furkan Semih Dündar. *Karadeliğin Ateşten Seddi (en: Black Hole's Wall of Fire)*. Bilim ve Teknik, February 2014.

Past Teaching Duties

2026 Spring **BIL 308: Biçimsel Diller ve Otomata Teorisi (Formal Languages and Automata Theory)**, *Amasya University*, Turkey.

2026 Spring **BIL 302: Bilgisayar Mimarisi (Computer Architecture)**, *Amasya University*, Turkey.

2026 Spring **MAT 202: Mühendislik Matematiği (Mathematics for Engineers)**, *Amasya University*, Turkey.

2026 Spring **MM 0202: Mühendislik Matematiği (Mathematics for Engineers)**, *Amasya University*, Turkey.

2025 Fall **FIZ 603: Advanced Mathematical Methods in Physics II (in English)**, *Sakarya University*, Turkey.

2025 Fall **FIZ 505: Relativity Theory (in English)**, *Sakarya University*, Turkey.

2025 Fall **FIZ 614: Field Theory (in English)**, *Sakarya University*, Turkey.

2025 Fall **PHY 111: Physics 1 (in English)**, *Sakarya University*, Turkey.

2025 Spring **FBE 501: Advanced Quantum Mechanics (in English)**, *Sakarya University*, Turkey.

2025 Spring **FIZ 112: Fizik 2 (Physics 102)**, *Sakarya University*, Turkey.

2025 Spring **FIZ 614: Field Theory (in English)**, *Sakarya University*, Turkey.

2024 Fall **FIZ 111: Fizik 1 (Physics 101)**, *Sakarya University*, Turkey.

2024 Fall **FBE 503: Advanced Mathematical Methods in Physics (in English)**, *Sakarya University*, Turkey.

2024 Fall **FIZ 603: Advanced Mathematical Methods in Physics II (in English)**, *Sakarya University*, Turkey.

2024 Fall **FIZ 505: Special Relativity Theory (in English)**, *Sakarya University*, Turkey.

2024 Fall **FIZ 505: Özel Relativite Teorisi (Special Relativity Theory)**, *Sakarya University*, Turkey.

2024 Spring **MAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2024 Spring **MM 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2024 Spring **BİL 306: Sistem Programlama (System Programming)**, *Amasya University*, Turkey.

2024 Spring **MAT 202: Mühendislik Matematiği (Engineering Mathematics)**, *Amasya University*, Turkey.

2024 Spring **MAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2023 Fall **MAK 105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2023 Fall **MAT 201: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2023 Fall **MAT 201: Mühendislik Matematiği (Engineering Mathematics)**, *Amasya University*, Turkey.

2023 Fall **GMAT 201: Mühendislik Matematiği (Engineering Mathematics)**, *Amasya University*, Turkey.

2023 Fall **MAT 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2023 Spring **MAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2023 Spring **GMAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2023 Spring **MM 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2023 Spring **BIL 306: Sistem Programlama (System Programming)**, *Amasya University*, Turkey.

2023 Spring **MAT 202: Mühendislik Matematiği (Engineering Mathematics)**, *Amasya University*, Turkey.

2023 Spring **MAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2022 Fall **MAT201: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2022 Fall **MAT203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2022 Fall **MAK105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2022 Fall **MAT201: Mühendislik Matematiği (Mathematics for Engineering)**, *Amasya University*, Turkey.

2022 Fall **GMAT201: Mühendislik Matematiği (Mathematics for Engineering)**, *Amasya University*, Turkey.

2022 Fall **FF1D501: Danışmanlık**, *Amasya University*, Turkey.

2022 Fall **FF1U503: Uzmanlık Alanı**, *Amasya University*, Turkey.

2022 Spring **FF1S538: Kuantum Progralama (Quantum Programming)**, *Amasya University*, Turkey.

2022 Spring **MAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2022 Spring **GMAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2022 Spring **MM 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2022 Spring **MAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2022 Spring **GMAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2022 Spring **MAT 102: Mathematics II (Calculus II)**, *Amasya University*, Turkey.

2022 Spring **MAT 204: Mühendislik Matematiği (Mathematics for Engineering)**, *Amasya University*, Turkey.

2022 Spring **MAK 408: Bitirme Çalışması (Graduation Project)**, *Amasya University*, Turkey.

2022 Spring **FF1D501: Danışmanlık**, *Amasya University*, Turkey.

2022 Spring **FF1U503: Uzmanlık Alanı**, *Amasya University*, Turkey.

2021 Fall **EEM 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2021 Fall **GEEM 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2021 Fall **MAT 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2021 Fall **GMAT 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2021 Fall **MAT 201: Mühendislik Matematiği (Mathematics for Engineering)**, *Amasya University*, Turkey.

2021 Fall **GMAT 201: Mühendislik Matematiği (Mathematics for Engineering)**, *Amasya University*, Turkey.

2021 Fall **MAT 101: Matematik I (Calculus I)**, *Amasya University*, Turkey.

2021 Fall **GMAT 101: Matematik I (Calculus I)**, *Amasya University*, Turkey.

2021 Fall **MAK 105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2021 Fall **GMAK 105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2021 Fall **MAK 401: İş Yeri Eğitimi (Workplace Training)**, *Amasya University*, Turkey.

2021 Fall **GMAK 401: İş Yeri Eğitimi (Workplace Training)**, *Amasya University*, Turkey.

2021 Spring **MAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2021 Spring **GMAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2021 Spring **MAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2021 Spring **GMAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2021 Spring **MAK408: Bitirme Çalışması (Graduation Project)**, *Amasya University*, Turkey.

2021 Spring **GMAK408: Bitirme Çalışması (Graduation Project)**, *Amasya University*, Turkey.

2020 Fall **MAK 105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2020 Fall **GMAK 105: Lineer Cebir (Linear Algebra)**, *Amasya University*, Turkey.

2020 Fall **MAT 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2020 Fall **GMAT 203: Olasılık ve İstatistik (Probability and Statistics)**, *Amasya University*, Turkey.

2020 Fall **MAK 401: İş Yeri Eğitimi (Workplace Training)**, *Amasya University*, Turkey.

2020 Fall **GMAK 401: İş Yeri Eğitimi (Workplace Training)**, *Amasya University*, Turkey.

2020 Fall **SSD1: Araştırma ve Rapor Hazırlama Teknikleri (Research and Report Preperation Techniques)**, *Amasya University*, Turkey.

2020 Fall **GSSD1: Araştırma ve Rapor Hazırlama Teknikleri (Research and Report Preperation Techniques)**, *Amasya University*, Turkey.

2020 Spring **MAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2020 Spring **GMAK 106: Bilgisayar Programlama (Computer Programming)**, *Amasya University*, Turkey.

2020 Spring **MAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2020 Spring **GMAT 202: Diferansiyel Denklemler (Differential Equations)**, *Amasya University*, Turkey.

2020 Spring **SSD2: Entrepreneurship II**, *Amasya University*, Turkey.

2020 Spring **GSSD2: Entrepreneurship II**, *Amasya University*, Turkey.

2020 Spring **MAK408: Bitirme Çalışması (Graduation Project)**, *Amasya University*, Turkey.

2020 Spring **GMAK408: Bitirme Çalışması (Graduation Project)**, *Amasya University*, Turkey.

2018 Spring **Physics 442 Lab sessions**, *Boğaziçi University*, Turkey.

2018 Spring **Physics 101-121 Lab sessions**, *Boğaziçi University*, Turkey.

2017 Fall **Physics 101-121 Lab sessions**, *Boğaziçi University*, Turkey.

2017 Spring **Physics 202 Lab sessions**, *Boğaziçi University*, Turkey.

2016 Fall **Grader for Java Programming Course**, *Boğaziçi University*, Turkey.

2016 Fall **Physics 101-121 Lab sessions**, *Boğaziçi University*, Turkey.

2016 Spring **Physics 101-121 Lab sessions**, *Boğaziçi University*, Turkey.

Popular Science Activities

21–24 June 2016 **Science Festival**, *Sakarya*, Pozitif Bilimevi.

2–5 Aug. 2011 **Astronomy and Physics Festival**, *Marmaris*, ITAP.

7–10 Aug. 2011 **Astronomy and Physics Festival**, *Marmaris*, ITAP.

27–30 Aug. 2011 **Astronomy and Physics Festival**, *Marmaris*, ITAP.

2–5 Sept. 2011 **Astronomy and Physics Festival**, *Marmaris*, ITAP.

19–20 Nov.. 2011 **Astronomy and Physics Festival**, *Marmaris*, ITAP.

24–25 Mar. 2012 **Astronomy and Physics for Teachers**, *Marmaris*, ITAP.

Languages

Turkish Native Speaker

English Advanced

Persian	Intermediate
Italian	Elementary
Russian	Elementary

Computer Skills

C, C++	**Good**	*General purpose*
Python	**Good**	*General purpose*
Wolfram Language	**Good**	*Symbolic calculations*
Matlab	**Good**	*Numerical calculations*
Machine Learning	**Good**	
OpenMP	**Good**	*Parallel programming*
OpenMPI	**Good**	*Parallel programming*
Adobe Illustrator	**Intermediate**	*Vector drawing*
Haskell	**Intermediate**	*Functional programming*
Emacs	**Good**	*Including modifications*
LaTeX	**Good**	*Also good at PGF macros for drawing*