



DAYANANDA SAGAR COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to Bangalore University
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka-560 078
Phone: +91 8042161762 / 26661104 Fax: 26660789
Website: <https://dsase.edu.in/>

DEPARTMENT OF BACHELOR OF SCIENCE (B. Sc.-PCM)



CIRCULAR

Date: 20/02/2023

All the Chemistry students of the batch 2021-2022 of B.Sc. (PCM) BU are required to attend the 30 hrs certification course on "Basic Chemistry for Interdisciplinary Sciences" from 2nd March 2023 to 6th April 2023 on the scheduled dates. The time table for the certification course is attached along with the circular. All the participating students kindly make a note of the dates and attend the certification course accordingly. No absentees will be permitted on the said dates.

All the participating students will be receiving a certificate for the same. Please note that there is no fee for attending this certification course. Hence all the B.Sc-Chemistry students are expected to make the best use of this opportunity.


HOD/ Principal
Dr. Kotresh Savanur M.Sc., B.Ed., KSET., Ph.D.
Assistant Professor & HOD-B.Sc.
Department of B.Sc.,
Dayananda Sagar College of Arts, Science & Commerce
Shavige Malleshwara Hills, Kumaraswamy Layout
Bengaluru - 560 111



DAYANANDA SAGAR COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to Bangalore University
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka-560 078
Phone: +91 8042161762 / 26661104 Fax: 26660789
Website: <https://dscase.edu.in/>



DEPARTMENT OF BACHELOR OF SCIENCE (B. Sc.–PCM)

Title of the Course: Basic Chemistry for Interdisciplinary Sciences for B.Sc Chemistry students (Batch- 2021-2023)

Department: B. Sc. (PCM)

Date: 01.04.2023

| Sl. No. | Particulars | Event related Details | | | |
|---------|---|--|--|---------------|--|
| 1. | Event* | ADD on CERTIFICATION PROGRAM | | | |
| 2. | Title of the Event | Basic-Chemistry for Interdisciplinary Sciences | | | |
| 3. | Date | 2 nd March 2023 to 6 th April 2023 | | | |
| 4. | Time | Thursday: 2 PM to 4 PM Friday: 2 PM to 4 PM Monday : 2 PM to 4 PM | | | |
| 5. | Venue | Tutorial Room No 4 , Building No. 17, Ground Floor | | | |
| 6. | Resource Person 1 Details ** (Profile to be enclosed) | Dr. Guruprasad M. S. | | | |
| 7. | Topics Covered | <ul style="list-style-type: none">To understand the fundamental aspects of Chemistry for interdisciplinary SciencesTo get insight into the various Analytical tools & Separation Techniques | | | |
| 8. | Resource Person 2 Details** (Profile to be enclosed) | NA | | | |
| 9. | Topics Covered | NA | | | |
| 10. | No. Faculty Participants (Enclose a copy of names with signatures) | Internal: Nil | | External: Nil | |
| 11. | No. Student Participants (Enclose a copy of names with signatures) | Internal:14 | | External: Nil | |
| 12. | Faculty Coordinator/s | Dr. Guruprasad M. S. | | | |
| 13. | Student Coordinator/s | Kalyan N-V Sem and Nanditha D Shetty–III Sem | | | |
| 14. | Total Expenditure (Details to be enclosed) | NA | | | |
| 15. | Sponsors and Amount (if any) | NA | | | |
| 16. | Agenda of the Event (Enclose a copy) | NA | | | |

| Sl. No. | Particulars | Event related Details |
|---------|--|---|
| 17. | Report uploaded on college website? If yes, give details: | |
| 18. | Report sent to media? If yes, give details: | NIL |
| 19. | Report uploaded in Social Media? If yes, give details: | - |
| 20. | Certificates Printed? (Enclose a copy***) | - |
| 21. | Feedback Collected? (Enclose a copy***) | - |
| 22. | Summary of the Event (Minimum 100 words) | The course is designed for the undergraduate science level students to understand the basic aspects of chemistry, chemistry of the biological molecules & its interaction. In addition, the course is enabled for the students to learn the essential analytical tools and separation techniques required in basic science research. This certification course facilitates the students to get vision into the multidisciplinary nature of chemistry, analytical tools. The course was scheduled for 30 hours three days a week. It commenced from 2 nd March 2023 and closed on 6 th April 2023. |
| 23. | Photographs of the Event (At least 10 relevant, clear, and appropriate photos with title and explanation. The jpg files need to be attached) | Photographs attached |

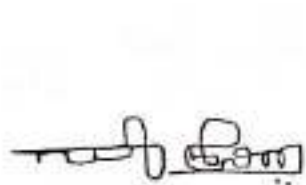
Notes:

* Seminar / Workshop / Symposium / Conference / Cultural Fest / Quiz / Sports / Literature Fest, etc.

** Name / Organization / Designation / Area of Expertise

*** Format Copy need to be attached and hard copy need to be filed

PS: Whichever column is not applicable, write as NA.



Event Co-Ordinator



HOD



IOAC Co-Ordinator



VICE-PRINCIPAL



PRINCIPAL

Dr. Kotresh Savanur
 Assistant Professor & HOD-B.Sc.
 Department of B.Sc.
 Dayananda Sagar College of Arts, Science & Commerce
 Shavige Malleshwara Hills, Kumaraswamy Layout
 Bengaluru - 560 111



DAYANANDA SAGAR COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to Bangalore University
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka-560 078
Phone: +91 8042161762 / 26661104 Fax: 26660789
Website: <https://dscasc.edu.in/>



DEPARTMENT OF BACHELOR OF SCIENCE (B. Sc.-PCM)

PROFESSIONAL CERTIFICATION COURSE – TOPICS COVERED

Title of the Course: Basic Chemistry for Interdisciplinary sciences

Course Date: 2nd March 2023 to 6th April 2023

Unit 1: Fundamentals of Chemistry: 10 hrs

Basics of inorganic, organic, physical and biochemistry, Nomenclature (IUPAC), molarity, molality and normality, types of bonding, Ionic, covalent and non-bonding interactions, Acids and bases, Atomic structure, periodic table and periodic properties, stoichiometry, chemical reactions and kinetics, solvent effects, functional groups in organic compounds, general named reactions and reaction mechanisms, carbohydrates, lipids, proteins, nucleotides, enzymes, photosynthesis.

Unit 2: Introduction to Chemical Biology: 10 hrs

Chemical biology/synthetic biology, Structure, function and chemistry of biological macromolecules including amino acids, proteins, nucleic acids and carbohydrates, Chemical kinetics and thermodynamics in biology, Chemical reactions and chemical diversity in Biology The Chemistry of Enzymes, Lipids, Fats & Steroids, Drug discovery, Drugs from Nature, Drug interaction.

Unit 2: Analytical & Separation Techniques: 10 hrs

Analytical instrumentation, signal and noise, Overview of optical methods of analysis: Components of optical instruments, atomic and molecular spectrometry based on absorption, emission and scattering, Electroanalytical techniques (basic electrochemistry, voltammetry, potentiometry).
Analytical separations and introduction to chromatographic methods, GC, LC, Mass spectrometry, electromigration techniques, hyphenated techniques, detectors, Analytical tools for petroleum refining.

Course Outcomes:

By the end of the course the students will:

1. Understand the basic principles of various branches of Chemistry.
2. Demonstrate a range of practical skills to conduct and infer experiments independently and in groups.
3. Apply the key concepts and standard methodologies to solve problems related to Chemistry and its allied areas


Signature of the faculty


Head, B. Sc.

Dr. Kotresh Savanur M.Sc., B.Ed., KSET., Ph.D.
Assistant Professor & HOD-B.Sc.
Department of B.Sc.,
Dayananda Sagar College of Arts, Science & Commerce
Shavige Malleshwara Hills, Kumaraswamy Layout
Bengaluru - 560 111



DAYANANDA SAGAR COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to Bangalore University
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka-560 078
Phone: +91 8042161762 / 26661104 Fax: 26660789
Website: <https://dscasc.edu.in/>



DEPARTMENT OF BACHELOR OF SCIENCE (B. Sc.-PCM)

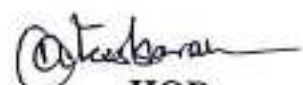
Add on Certification Course

**Title of the Course: Basic Chemistry for Interdisciplinary Sciences for B.Sc
Chemistry students (Batch- 2021-2023)**

Time Table

| Date | Day | Timings |
|------------|----------|--------------------|
| 02/03/2023 | Thursday | 2 PM to 4 PM |
| 03/03/2023 | Friday | 2 PM to 4 PM |
| 06/03/2023 | Monday | 2 PM to 4 PM |
| 09/03/2023 | Thursday | 2 PM to 4 PM |
| 10/03/2023 | Friday | 2 PM to 4 PM |
| 13/03/2023 | Monday | 2 PM to 4 PM |
| 16/03/2023 | Thursday | 2 PM to 4 PM |
| 17/03/2023 | Friday | 2 PM to 4 PM |
| 20/03/2023 | Monday | 2 PM to 4 PM |
| 23/03/2023 | Thursday | 2 PM to 4 PM |
| 24/03/2023 | Friday | 2 PM to 4 PM |
| 27/03/2023 | Monday | 2 PM to 4 PM |
| 02/04/2023 | Thursday | 2 PM to 4 PM |
| 03/04/2023 | Friday | 2 PM to 4 PM |
| 06/04/2023 | Monday | 1:30 PM to 3:30 PM |


Signature of the Faculty


HOD
Dr. Kotresh Savanur M.Sc., B.Ed., KSET., Ph.D.
Assistant Professor & HOD-B.Sc.
Department of B.Sc.,
Dayananda Sagar College of Arts, Science & Commerce
Shavige Malleshwara Hills, Kumaraswamy Layout
Bengaluru - 560 111



DAYANANDA SAGAR COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to Bangalore University

Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka-560 078

Phone: +91 8042161762 / 26661104 Fax: 26660789

Website: <https://dsccac.edu.in/>

DEPARTMENT OF BACHELOR OF SCIENCE (B. Sc.-PCM)



PROFESSIONAL CERTIFICATION COURSE

Title of the Course: Basic Chemistry for Interdisciplinary sciences

Course Date: 2nd March 2023 to 6th April 2023

Attendance Sheet

| Sl No | Reg No. | Student Name | 02/03/2023 | 03/03/2023 | 06/03/2023 | 09/03/2023 | 10/03/2023 | 13/03/2023 | 16/03/2023 | 17/03/2023 | 20/03/2023 | 23/03/2023 | 24/03/2023 | 27/03/2023 | 02/04/2023 | 03/04/2023 | 06/04/2023 |
|-------|---------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | 105 | Srinidhi HA | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 2 | 139 | Jeeva Ratshol | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 3 | 144 | Rohini Rao | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 4 | 149 | M. Akhbar | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 5 | 159 | Chandrasekhar | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 6 | 085 | Mouishy M | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 7 | 001 | ARHISHK | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 8 | 006 | Pradyumn K | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 9 | 015 | Pranav Laksh | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |
| 10 | 014 | Prudhvi C | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs | abs |

Signature of the Faculty

Chetbari

Head, B. Sc. W. Sc. BEd. MSET, PhD
Assistant Professor & HOD-B.Sc.

Department of B.Sc.

Dayananda Sagar College of Arts, Science & Commerce

Shavige Malleshwara Hills, Kumaraswamy Layout

Bangalore - 560 117