

Vivekanand College, Kolhapur (Autonomous)

Department of Chemistry

Curriculum relevance: Course contents with focus on Employability / Entrepreneurship /Skill development (UG) 2018-19 to 2023-24

Sr. No.	Course Code	Course / SECs Titles	Year of Introduction	Employability	Entrepreneurship	Skill Development
1.	DSC- 1002A	Section-I Inorganic Chemistry Section-II Organic Chemistry	2018-19	NIL	NIL	CO6: Develop hands-on skills in operating common analytical instruments,
2.	DSC- 1002B	Section-I Physical Chemistry Section-II Analytical & Industrial Chemistry	2018-19	NIL	NIL	CO6: Develop hands-on skills in operating common analytical instruments,
3.	DSC- 1002C	Section-I Physical Chemistry Section-II Analytical & Industrial Chemistry	2019-20	CO4: Gain the knowledge about various techniques in Chromatography.	CO5: Study the various aspects in Dairy and Leather chemistry.	CO1: Acquire fundamental skills required for Analytical & Industrial Chemistry
4.	SEC-SD	Basics in Chemistry	2019-20	NIL	NIL	CO3: Students should be able to develop experimental skill
5.	DSC- 1002D	Section-I Inorganic Chemistry Section-II Organic Chemistry	2019-20	CO3: Acquire the aspects of conversion of chemical energy into electrical energy.	NIL	CO6: Methods of synthesis of amines, diazonium Salts, amino acids, peptides and Proteins.
6.	SEC-SD	Basics in Chemistry	2019-20	CO2: Students should use their own HTML JavaScript and Advanced PHP Programming in order to develop web pages.	NIL	CO3: Students should be able to develop experimental skill
7.	DSC- 1002E1	Section-I Physical Chemistry Section-II Inorganic Chemistry	2020-21	CO7: Describe the synthesis and applications of the semiconductors and superconductors in electrical and electronic devices.	CO8: Impart essential knowledge regarding classification, types, mechanism and applications of catalyst in industrial fields.	

8.	DSC- 1002E2	Section-I Organic Chemistry Section-II Analytical Chemistry	2020-21	CO2: Adopt the utility of reagents in organic synthesis.	CO5: Acquire the knowledge of pharmaceuticals and its use.	CO7: Demonstrate the skills of titrimetric and gravimetric analysis. CO8: Develop the skills of potentiometric and colorimetric analysis.
9.	SEC-SE	Basic Analytical Chemistry	2020-21	CO1: Understand and implement quality control and assurance measures in analytical processes to ensure the reliability and precision of results, aligning with industry standards.	CO5: Cultivate an entrepreneurial mindset by exploring potential applications of analytical chemistry in various industries	CO3: Develop hands-on skills in operating common analytical instruments, such as spectrophotometers, chromatographs, and titration setups, ensuring competence in practical laboratory techniques.
10.	DSC- 1002F1	Section-I Physical Chemistry Section-II Inorganic Chemistry	2020-21	CO8: Develop interest in various nuclear reactions and role of radio isotopes in medicinal, industrial and archaeology fields.	NIL	CO10: Acquire a basic understanding of nanochemistry, nanotechnology and its fascinating aspects.
11.	DSC- 1002F2	Section-I Organic Spectroscopic Techniques Section-II Industrial Chemistry	2020-21	CO6: Adopt the knowledge of sugar and jaggery industry.	CO7: Learn and understand fermentation processes involved in the manufacturing of alcohol.	CO5: Learn the manufacturing processes of heavy chemicals.
12.	SEC-SF	Project work and industrial study tour	2020-21	CO2: Develop professional skills essential for employability.	CO5: Cultivate an entrepreneurial mindset by exploring potential applications of analytical chemistry in various industries	CO4: Connect theoretical knowledge to real-world applications in industries such as pharmaceuticals.



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