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1.3.2: BROCHURES OF VALUE-ADDED COURSES FOR IMPARTING TRANSFERABLE AND LIFE SKILLS OFFERED DURING LAST FIVE YEARS

4 2019 - 2020

- Epigraphy and Numismatics
- History of Performing Arts & Theatre in Ancient India
- Maritime Heritage of Ancient India
- Brief study of the Comparative Mythology of the world
- Diploma in Ancient Indian Culture and Heritage
- Women Pioneers in Early World Cinema (Part I and II)
- Research Paper Writing and Presentation on Perception: In the eye of the beholder.
- Technical Analysis
- Open ended project based Plant propagation through various modes
- Antibacterial properties of silver nanaoparticles
- Applications of Chem-Draw : A tool in Chemistry
- Applications of MATH TYPE: An equation writing tool
- Application of LATEX: Software for publishing research articles in Chemistry.
- Research Project in Food and Environmental Chemistry
- Research Project in Inquiry based Practicals for Organic Chemistry
- Workshop: 'Chemistry in Context'
- Research Methodology and Analytical Techniques (Advanced)

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- A survey of awareness, behaviour and level of sensitivity of students towards environmental issues among students of St. Xavier's College, Mumbai
- Global Climate Change and Social Justice
- From College to Corporate A Soft skills course.
- Primary Market Research
- Applications of Distributions in Industry
- Diploma Course in Forensic Science

4 2018-2019

- Epigraphy and Numismatics
- History of Performing Arts & Theatre in Ancient India
- Maritime Heritage of Ancient India
- Brief study of the Comparative Mythology of the world
- Translation, Children's Literature and Travel Writing
- Research Paper Writing and Presentation on Individual and group differences: exploring and appreciating diversity
- Technical Analysis of Stocks
- Embryonic Tissue Culture: A Primer for Animal Cell Culture Techniques.
- Finding Hidden Messages in Biomolecules: Bioinformatics Approach
- Bioinformatics: Solution to the Biological Problems
- Morphology of fruits and vegetables
- Extraction of oils from botanical samples
- Open ended project based Phylogenetic tree of the chitinase enzyme present in various plants using FASTA code
- Conserving Artefacts: A Chemical View
- Research Project: Metal oxide semiconductors as effective photocatalyst: pros and cons
- Research Project: Complex Chemistry
- Research Project in Food and Environmental Chemistry

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- Applications of Chem-Draw : A tool in Chemistry
- Research Methodology and Analytical Techniques (Basic)
- Research Methodology and Advanced Analytical Techniques
- Mapping the Microscopic Biodiversity of Sanjay Gandhi National Park, Mumbai
- Estradiol-mediated Development of Retina in Chick Embryo system
- Animal Tissue Culture
- Diploma Course in Forensic Science
- Evolution: the cornerstone of science
- Basic skills in wildlife filmmaking

4 2017-2018

- Study of Epigraphic and Numismatics of India: Certificate Course
- Mother Earth and her secrets of sustainability: QEP
- Research Paper Writing and Presentation on Psychological Review of Famous Persons, characters, events & trends Technical Analysis of Stocks
- Joy of self discovery and Cosmic Hug
- Sports Business Management.
- Finding Hidden Messages in Biomolecules: Bioinformatics Approach
- Primary Tissue Culture
- Morphology and identification of vegetables
- Digitisation of botanical specimen
- Open ended project Determining optimal pH for the synthesis of silver nano particles using black tea extract
- Chemistry in Art
- Research Methodology and Analytical Techniques (Basic)
- Research Methodology and Advanced Analytical Techniques
- Vertebrate embryonic development creating a developmental atlas using whole mounts of Chick and Zebrafish embryos.
- Does estradiol regulate retinal development and neurogenesis?

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- Mapping the Microscopic Biodiversity of Sanjay Gandhi National Park, Mumbai
- ROS studies in yeast
- Animal Tissue Culture
- Diploma Course in Forensic Science
- Introduction to BEES: (BEES stand for Behavioural, Ecological and Evolutionary Sciences)
- Ornithology and Herpetology

4 2016-2017

- Epigraphy and Numismatics
- History of Performing Arts & Theatre in Ancient India
- Maritime Heritage of Ancient India
- Brief study of the Comparative Mythology of the world
- Research Paper Writing and Presentation on Application of Psychology to current events/phenomena
- Hinduism and Buddhism
- Sports Business Management
- Permanent slides preparation.
- Open ended project
- Synthesis and Isolation of some Organic Compounds: An Analytical Approach
- Research Project in Pharmaceutical Chemistry
- Research Project in Food and Environmental Chemistry
- Estimation of Copper Extracted from an Ayurvedic Drug Tamra Bhasm by Various Analytical Techniques
- Research Methodology and Analytical Techniques (Basic)
- Neurogenesis and Differentiation in Chick retina
- Fluorescent studies of Oxidative Stress
- Life in a Drop II
- Nutritional Assessment of Students of St. Xavier's College, Mumbai

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- Animal Tissue Culture
- Diploma Course in Forensic Science
- Introduction to Bioinformatics

4 2015-2016

- Epigraphy and Numismatics
- History of Performing Arts & Theatre in Ancient India
- Maritime Heritage of Ancient India
- Research Paper Writing and Presentation on Learning & Memory
- Joy of Self Discovery
- Awaken to Cosmic Compassion
- Partners for Urban Knowledge and Research (PUKAR)
- Bio-synthesis of Silver Nanoparticles and Study of their Size Selectivity and Stability with Different Capping Agents.
- Development and Validation of an Antimicrobial Agent/S from a Combined Pharmaceutical Drug Formulation using Spectrophotometry
- Open ended experiment
- Screening of Natural Sources for Inhibition of Biofilm formation
- Use of Fluorescence Microscopy to Study Reactive Oxygen Species (ROS) Stress in Ethanol Producing Yeast
- · Hypoxia and Reproductive fitness in Daphnia
- A study of the effects of Stress on Chironomus larvae
- Animal Tissue Culture
- Diploma Course in Forensic Science
- Basic astrobiology: is there life elsewhere in the universe?
- DNA damage and repair
- Ornithology and Herpetology



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2019 - 2020



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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

CERTIFICATE COURSE IN

EPIGRAPHY AND NUMISMATICS OF INDIA

No of credits: 2 (30hrs or more)

Are you interested in learning about the scripts and coins of ancient

India....

Would you like to utilise current sources to reconstruct the past!

This course will deal with Literary, Archaeological, Numismatic and Epigraphic evidences for a holistic view of the facets of Indian culture.

- Introduction to Epigraphy Ancient Indian Scripts Introduction to Numismatics
- Coinage of Janapada (PMC & EUCC), Indo-Greek-Parthian- Scythian, Western Ksatrapas, Kushan, Satavahana, Tribal coins, Gupta, Pallavas, Chola and Cheras, Delhi Sultanate and Greater Mughal Coins.
- Registration closes on 30th Nov. 2019
- · Course commences in January 2020.

For Details contact AIC Department.

2019-2020



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

HISTORY OF PERFORMING ARTS AND THEATRE IN INDIA

No of credits: 2 (30hrs or more)

Study the essence of Ancient Indian culture!

Let's take a look at the synergy between fluid and static arts, and broaden their horizon.

- Understand the elements of Music-Nad, Shruti, Swara, Saptak.
- Study the Structure of a Raga- Genesis- Tat, Jati, Vadi, Samvadi, Varjit Swara, Samay Chakra, the importance of Tala (Both Carnatic and Hindustani) and constituents of Khyal and Gath in Instrumental music.
- Study of the elements and structure of Dance.:- The concept of Nritta,
 Nrithya and Natya.
- Study of Abhinaya- Angika, Vachika, Aharaya and Sattvika.

Registrations close on 31st August 2019 FOR REGISTRATION: CONTACT AIC DEPT.

2019-20

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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

Marítime Heritage of Ancient India

No of credits: 2 (30hrs or more)

- This course will help to understand the maritime tradition which existed in India from the proto-historic period.
- Maritime Trade in early India.
- Ports and Ship yards and types of ship on the western and the eastern coast of India. (Marine archaeology)
- River Economy
- Trading centers and merchant guilds.
- Trade and river system in Northern, Central, Deccan and South India.
- Trade In Early Medieval Period
- Trade with South and South East Asia. East Asian Trade and Early European Trade

Registrations close on 15th December 2019 **COURSE DURATION 45 hours**

FOR REGISTRATION: CONTACT AIC DEPT.

2019-2020



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

Brief study of the Comparative Mythology of the World.

- Study of Mythologies of world civilizations.
- Understanding various classifications of myths.
- Comparative analysis of Indian and world mythologies
- Introduction to World Mythology
- Creation and Regeneration Myths
- Cult of Deities, Heroes & Animals
- Space , After Life , Time and End of Times.

Registrations close on 15th December 2019 FOR REGISTRATION: CONTACT AIC DEPT.

No of credits: 2 (minimum 30hrs)



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St. Xavier's College (Autonomous), Mumbai

Department of Ancient History, Culture and Archaeology

DIPLOMA IN ANCIENT INDIAN CULTURE & HERITAGE

Coursework:-

2019-2020

- An exam for each module of 100 mark each will have to be attempted by the participants at the end of the instructional year in the month of April.
- 2. A dissertation consisting of a topic from within the modular framework has to be submitted before the final exam and will carry 150 marks.
- 3. Only after completing this course work will the participant be awarded the Diploma certificate.
- 4. Fieldwork is an essential part of this course, participants are expected to attend at least one field trip during the instructional year. Fees for the field work to excluded from the course fees. A few lectures will also be held on campus with prior notification to students for face to face interaction

Eligibility:-

1. HSC cleared candidates from any stream can apply.

Course fees:- Rs.12,000/-

Day: - Saturday

Timing :- 2:00pm - 5:00pm

Mode of Teaching :- Online

For details contact:

Dr. Anita Rane- Kothare (HOD),

Mr. Jason Johns (Course Co-ordinator) - jason.johns@xaviers.edu

Admission Form Link:-

https://docs.google.com/forms/d/e/1FAIpQLScfvKr38JrrWMKxP-hz9c8JhRGlNAAvubPwiqQEUcuapayD0A/viewform?usp=sf_link







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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ENGLISH

HONOURS ACTIVITY-WOMEN PIONEERS IN EARLY WORLD CINEMA 2019-2020

Name of Instructor: DR JETHU MUNDUL

Duration: September 6-17, 2019 and January 7 – 11, 2020. 2 – 5 PM

No. of Credits Offered: Two (30hrs)

Course Fee: Rs. 1300/-

- Cinema, a new language form came into being at the turn of the 20th century, using audio and visual language forms of the existing Arts, to acquire an identity of its own. It was immersed in a series of histories which conditioned the process of its invention into the shape of cinema. Film scholars reached back to the beginnings in the 1920s, and it is partly through their eyes that the lost world of women pioneers in early cinema was retrieved and shown.
- This course will be unique. It is the FIRST OF ITS KIND IN MUMBAI as the lectures have been
 uniquely and specifically designed and compiled from world resources by the presenter.
- Assessment Method: Attendance, Interactivity and Assignments
- Details of the Instructor: Prof. Jethu (Kamalendra) Mundul is an alumnus of the Film and Television Institute of India (FTII), Pune from 1975.
- To register, contact Dr Pearl (9867978730)



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF PSYCHOLOGY

Honours Activity No of credits: 2 (30hrs or more)

Research Paper Writing and Presentation at Khandala Seminar 2019-20 on

PERCEPTION: IN THE EYE OF THE BEHOLDER

- The Psychology department of St. Xavier's College, Mumbai has been organizing an annual seminar for their undergraduate students for over 25 years. This co-curricular activity is open to FY, SY and TY students of the department and is held over 2 days (in a venue away from college). Individual students choose to present papers in keeping with a broad theme (that is selected after brainstorming with students). Some of the themes explored include Controversies in Psychology, An interdisciplinary approach to Psychology, Personality theorists, Human sexuality, Application of psychology to current events and phenomena.
- A broad theme is agreed upon after brainstorming with students. Each student chooses a specific topic (within that theme) to write their seminar paper on.
- They receive a two hour initial training on how to decide on specific topic for their seminar paper. They are taught basic research and reference skills. Then students need to work on their own time (involving more than 15 hours of work, usually during the diwali vacation) to create a literature review and outline for their paper.
- They will consult with the teaching staff (they have chosen as their guides) to organize and
 refine their written paper to be submitted. Final year students who have had experience
 with this activity are also available to mentor the students doing this for the first time.

Enrolled students also receive one hour training on effective presentation skills before the eminar.

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF MANAGEMENT STUDIES

Honours Activity: Technical Analysis 2019-2020

Name of Instructor: Mr. Sagar Taekar

Total number of classroom training: 18 hrs + 12hrs (Practical)

Total -30 hrs

No. of Credits Offered: Two (30hrs)

- Course Content
- Difference between Technical & Fundamental Analysis
- Understanding of important financial terms & categorization of stocks
- Candlestick patterns
- · To register, contact Mr. Pritesh Arte



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Honours Open Ended ProjectPlant propagation through various modes 2019-2020

Mr. Alok Gude

No. of Credits Offered: Two (30hrs)

 This course will help students to understand methods of plant propagation. The project will include growing and propagating of plants through seeding, cutting and grafting. The seeds of Black eyed pea leaves of <u>Sansevieria</u> and <u>Pedilanthus</u> plants will be used for the experiments. Evaluation will be done on the experimental setup, observations documented and written project report.

To register, contact The Botany Department



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Honours Activity Research Project Antibacterial properties of silver nanoparticles 2019-20

Mr. Royston Lobo and Dr. Vijaya Lobo
No. of Credits Offered: Two (30hrs)

- Nanoparticles are materials that are between 1 and 100nm in diameter (Edmundson.M, 2013). The reason of nanoparticles finding immense use, more than antibiotics is that the mechanism of action of nanoparticles is direct contact with bacterial cell wall instead of penetrating the cell which prevents the bacteria in having resistance for it.
- In a time of growing MDR in which most bacterial strains have become resistant, nanoparticles have emerged as a strong alternative to cure patients of infections. However, further research needs to be done for the worldwide use of nanoparticles replacing traditional antibiotics.

To register, contact The Botany Department



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Certificate Course (2 credits)

Workshop on Applications of Chem-Draw including Literature Survey 2019-2020. Dr. Sandip R. Kale

- One cannot effectively communicate concepts in organic chemistry and life science without using structural representations. This course will help you to communicate what you have learned in the class or discovered in lab. To help you with this communication, a software program called ChemDraw (ChemBioDraw) has been developed.
- Topics to be covered: Chem Draw basics, drawing techniques, analysis tools, drawing chemical structures, captions and atom labels, orbital's, symbols and other shapes, use of TLC plate tool, prediction of HNMR and ¹³C NMR, drawing reactions and their mechanism, sharing ChemDraw information, designing graphical abstract, online and offline literature techniques.

Duration: 10 days (11th Jun to 25th June 2019)

Level of students: TYBSc (Chemistry)

Requirement: Students should carry their charged laptop.

No. of students: 50

Contact Chemistry Department

Assessment method: Written Project

Report

Contact: Dr. Sandip R. Kale

sandip.kale@xaviers.edu



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE 2 CREDITS

Workshop on Applications of Math Type: An equation writing tool 2019-2020.

Dr. Sandip R. Kale

Math Type is interactive equation software from developer Design Science (Dessci) that lets you create and annotate math notation for word processing, desktop publishing, presentations, eLearning, and more. Math Type is a complementary desktop program that allows users to create formulas, edit them, and insert them into a variety of documents. With this software students, educators, and professionals can build authentic formulas for research papers and rigorous review. Traditional word processors are limited when it comes to working with complex mathematical equations or scientific expressions.

Duration: 10 days (1st july to 17th july 2019) Level of students: TYBSc (Chemistry)

Requirement: Students should carry their charged laptop.

No. of students: 50

Contact Chemistry Department

Assessment method: Written Project Report

Contact: Dr. Sandip R. Kale sandip.kale@xaviers.edu MathType



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY CERTIFICATE COURSE (2 CREDITS)

Application of LaTeX: Software for publishing research articles in Chemistry.

Workshop 2019-2020

Aditya Chalishazar

- LaTeX is a very powerful and versatile typesetting system, and it is completely free. It can be used to create high-quality technical and scientific documents. It can be used to write letters, reports, articles, and even to prepare presentations. LaTeX allows the writer to focus on the content of the document, while the rest of the typesetting is taken care of by the software. Through a series of hands-on sessions, the learner will be introduced to the most important aspects of LaTeX and how they can use this software as an indispensable typesetting tool for articles, reports, presentations, etc.
- <u>Topics to be covered</u>: Introduction to LaTeX, Writing a basic document in LaTeX, Accents and special characters in LaTeX, Mathematics in LaTeX, Writing a Technical Report in LaTeX, Other applications: Making question papers, presentations, MO diagrams, etc. on LaTeX

Duration: 10 days **Level of students:** TYBSc (Chemistry) **Requirement:** Students should carry their charged laptop.

No. of students: 20

Contact Chemistry Department

Assessment method: Written Project Report





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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project in Food and Environmental Chemistry 2019-20

Dr. Pralhad Rege and Dr. Nikhila Bhat

No. of Credits: 2

- The prime aim of this project will be to evaluate different aspects of food and environmental chemistry from perspective of safety and wellbeing of mankind. The project will mainly be divided into two parts. In Water analysis, various water samples from the different parts of Mumbai will be evaluated for different essential parameters (According to The Environmental Protection Agency Act, 1992) like Acidity, Alkalinity, Salinity, Dissolved Chlorine. TDS, Sulphate, COD, BOD, DO, Nitrite Content and Fe Content. In food analysis, qualitative analysis of commercial brands of cold drinks will be done by instrumental and non-instrumental methods. Various parameter like pH, carbon dioxide, glucose, phosphate, Alcohol and Sucrose content will be studied for all the cold drinks samples. A comparative study will also be carried out.
- · Evaluation will be done on the basis of written project report.

Duration: 08-10 weeks

Deadline for application: 25th August, 2019

Level of students: FYEL SYBSc No. of students: 8

Assessment method: Written Project Report

Contact: Dr. Nikhila Bhat nikhila bhat@xaviers.edu





ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project in Inquiry based Practicals for Organic Chemistry 2019-2020

Dr. Nikhila Bhat

No. of Credits: 2

One of the unique factors of chemistry is that it can be manipulated extensively to one's design. The project is open-ended and focusses exclusively on re-designing of organic synthesis with respect to reagents, stoichiometry, analysis and inference; and to perform a comparative study on them. The project involves a planning session, experimental sessions followed by a written report. This project would allow students to design, plan, execute and extrapolate the protocols for a given practical on their own; along with its critical analysis and interpretation.

Duration: 08-10 weeks

Deadline for application: 25th August, 2019

Level of students: FYEL SYBSc

No. of students: 6-8

Assessment method: Written Project Report

Contact: Dr. Nikhila Bhat nikhila.bhat@xaviers.edu





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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project: 'Chemistry in Context' 2019-2020 Dr. Geeta Kotian and Ms. Saima Khan No. of Credits: 2

- Chemistry is a discipline that affects every aspect of our lives. Cars, smartphones and medicines
 are only possible because their developers understand chemistry. Renewable energy relies on
 sound chemistry. Laws and policies affect our exposure to chemistry and dependence on
 chemistry. We therefore cannot afford to ignore chemistry.
- The goal of this course is to establish a relationship of chemical principles with people's everyday lives. It includes health, food and nutrition, kitchen chemistry, plastics, chemicals in the environment etc.
- · The course will include lectures and lab work.

Students of any stream (Arts/Science) are welcome.

Maximum Intake: 10 students

Duration: September-April

Deadline for application: 20th August 2019

Register at: Chemistry Department

Contact: Ms. Saima Khan saima khan@xaviers.ed



St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2019-20 offered by Caius Research Laboratory Research Methodology And Analytical Techniques (Advanced)

Course comprises designing experiments and learning techniques in Research Methodology

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15; Course Fees: Rs -1500 (Basic)/-

Evaluation: Continuous and submission of report

Duration: 30th October to 6th November 2019 - 9:30am - 5pm every day, Attendance compulsory on every day.

Faculty Incharge: Dr. Priya Sundarrajan (email: priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

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Honours Activities (2019-2020)

A survey on awareness, behaviour and level of sensitivity of students towards environmental issues among students of St Xavier's College, Mumbai.

The aim is to comprehend the behaviour and attitude of students of our college towards environmental problems and will involve the following: Identify the most important and valid environmental issues in the current scenario; Prepare a sampling plan and Design a questionnaire; Conduct a survey within college; Analyse the data collected; Write a report.

Class: FY BSc. (Not having Statistics as one of their course)

No. of Students: 30

Credits: 2

Duration: Three Months

Evaluation: Continuous Evaluation and Report submission

Course conducted by:

Dr. Seema Das

(In collaboration with Dr. Ayesha Dias, Department of Statistics)

Course Fees Rs. 500/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry



Honours Activities (2019-2020)

Lecture Series: Global Climate Change

GCC needs to be thought of in the context of environmental justice, as some countries and people are facing disproportionate impacts of climate change. This interactive course will explore environmental justice issues not just theoretically but directly through first hand accounts and stories of injustice. Students in this hands-on course will also learn concrete ways of how to bring about change by engaging in an action project of their choosing.

Class: FY/SY/TY of all disciplines

No. of Students: 20

Credits: 2

Duration: Three Months (November 2019 to January 2020) Evaluation: Continuous and one Compulsory Action Project Course coordinator: Dr. Priya Sundarrajan

Course facilitator: Ms. Janjari Jasani

> Course Fees Rs. 1000/-

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai

Department of Life Science and Biochemistry

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Honours Activities (2019-2020)

Studying chick retinal neurogenesis

Development of retinal neuronal layers studied using histological techniques, in the chick embryo system.

Class: SY BSc.

No. of Students: 3

Credits: 2

Duration: Five Months (November 2019 to April 2020)

Evaluation: Project report and viva.

Course conducted by: Dr. Radhika Tendulkar

> Course Fees Rs. 2000/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai

Department of Life Science and Biochemistry





Algal CO₂ scrubbers for use as air purifiers.

Microalgae are one of the most efficient photosynthetic CO2 fixers. They produce oxygen during this process. Since they require minimum nutrients and light to carry out this process one can design lighting solutions to double up as algal reactors carrying out air purification.

Class: SY/TY BSc.

No. of Students: 6

Credits: 2

Duration: Five Months (November 2019 to April 2020)

Evaluation: Project report and viva.

Course conducted by: Dr. Binoj C Kutty

Course Fees Rs. 2000/-

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai Diploma in Forensic Science and Criminal Law 2019-2020 Department of Zoology

The course has been formulated with the aim, to provide an introduction and orientation to the functioning of the Indian Criminal Justice delivery system, and the role forensic science plays in this process. With the use of case studies, mock crime scenes and various practicals, it gives the students the opportunity to hone the basic skills necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security, Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science and the law.

- Admissions for the July 2019 to April 2020 batch are open.
- Eligibility Criteria Minimum HSC certificate or equivalent with a 60% grade (Prerequisite: Arts (Psychology), Science or Law)
 - · Selection Method: Merit based & Interview
 - Duration and Timings: One Academic year (July to April)
 - Timings: 4:00 pm 7:00 pm Monday, Tuesday & Wednesday
 - Fees: Course Fees: Rs. 27,000 + 500/-
 - · Faculty Members

Dr. Pushpa Sinkar, M.Sc., Ph.D (pushpa.sinkar@xaviers.edu)
Ms. Alethea Vaz, M.Sc. (alethea.vaz@xaviers.edu)
Ms. Riva Pocha, M.Sc. (riva.pocha@xaviers.edu)
Ms. Sejal Gupta, M.Sc. (sejal.gupta@xaviers.edu)



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF STATISTICS

Honours Activity-From College to Corporate – A Soft skills course.

Name of Instructor: Mr.Jigar Rambhia, Mr. Tushar Paharia & Mr.Soumyadut Nag.

Duration: 28th June -1st July & 5th July 2019 No. of Credits Offered: Two (30hrs)

- The Department of Statistics is conducting a Soft Skills Development Workshop for the students of TYBSc Statistics From 28th, 29th and 1st July 2019 at the St.Xavier's Villa at Khandala.
- · Group Discussion session
- session on public speaking and communication skills
- sessions like Get Magnetic and Break Time Clutter.
- resume building session by Mr. Jigar Rambhia

To register, contact Ms. Piyali Unnikrishnan



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF STATISTICS

Honours activity-Primary Market Research
Trainer: Payal Sadarangani

Dates: 23/9, 1/10, 21/10,27/10, 3/12 -2019 No. of Credits Offered: Two (30hrs)

- The Department of Statistics is conducting a workshop for the students of Statistics- You can gain first- hand experience on a live industry project, applying theoretical knowledge to practical purposes.
- This is a live group PMR project wherein the students will get hands-on experience on collecting the data based on their objective to analyzing the same using data visualization, descriptive statistics and Statistical Modelling (Binary Logistic) and also work on newer techniques like Social media listening.

To register, contact Ms. Pooja.H.Ochnaney



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI <u>DEPARTMENT OF STATISTICS</u>

Honours Activity-Applications of Distributions in Industry
Trainer: Moumita Sarker

Duration: 10th Jan to 14th Jan 2020 No. of Credits Offered: Two (30hrs)

- The Department of Statistics is conducting a workshop for the students of Statistics- how distributions are applied by analytics professionals in their regular Business analysis and model building.
- Outcome: Exposure of how Statistics is widely used in various industries.
- Students will gain knowledge about Applications of Statistical distributions in Marketing Analytics, Financial Analytics, Consumer Financing, Risk Framework, Fraud detections.
- Details of the Instructor: Vice President, Analytical Consulting-Expertise in Retail, BFSI,E commerce, Customer Lifecycle management Company: Cartesian Consulting
- To register, contact Ms. Pooja.H.Ochnaney



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2018 - 2019



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY.CULTURE AND ARCHAEOLOGY

CERTIFICATE COURSE IN

EPIGRAPHY AND NUMISMATICS OF INDIA 2018-2019

- Are you interested in learning about the scripts and coins of ancient India....
 - · Would you like to utilise current sources to reconstruct the past!

This course will deal with Literary, Archaeological, Numismatic and Epigraphic evidences for a holistic view of the facets of Indian culture.

- Introduction to Epigraphy Ancient Indian Scripts Introduction to Numismatics
- Coinage of Janapada (PMC & EUCC), Indo-Greek-Parthian- Scythian, Western Ksatrapas, Kushan, Satavahana, Tribal coins, Gupta, Pallavas, Chola and Cheras, Delhi Sultanate and Greater Mughal Coins.
- Registration closes on 30th Nov. 2018
- Course commences in January 2019 (minimum 30hrs)

For Details contact AIC Department.



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE AND ARCHAEOLOGY

Certificate Course in

HISTORY OF PERFORMING ARTS AND THEATRE IN INDIA 2018-2019

Study the essence of Ancient Indian culture!

Let's take a look at the synergy between fluid and static arts, and broaden their horizon.

- Understand the elements of Music- Nad, Shruti, Swara, Saptak.
- Study the Structure of a Raga- Genesis- Tat, Jati, Vadi, Samvadi, Varjit Swara, Samay Chakra, the importance of Tala (Both Carnatic and Hindustani) and constituents of Khyal and Gath in Instrumental music.
- Study of the elements and structure of Dance.:- The concept of Nritta, Nrithya and Natya.
- Study of Abhinaya- Angika, Vachika, Aharaya and Sattvika.

Course duration: Minimum 30 hours

Registrations close on 21st August 2018

FOR REGISTRATION: CONTACT AIC DEPT.

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE AND ARCHAEOLOGY

Certificate Course in Maritime Heritage of Ancient India 2018-2019

- This course will help to understand the maritime tradition which existed in India from the proto-historic period.
- · Maritime Trade in early India.
- Ports and Ship yards and types of ship on the western and the eastern coast of India. (Marine archaeology)
- River Economy
- Trading centers and merchant guilds.
- Trade and river system in Northern, Central, Deccan and South India.
- Trade In Early Medieval Period
- Trade with South and South East Asia. East Asian Trade and Early European Trade

Registrations close on 20th December 2018

COURSE DURATION 45 hours

FOR REGISTRATION: CONTACT AIC DEPT.



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY.CULTURE AND ARCHAEOLOGY

Certificate Course In
Brief study of the Comparative Mythology of the World.
2018-2019

- Study of Mythologies of world civilizations.
- Understanding various classifications of myths.
- Comparative analysis of Indian and world mythologies
- Introduction to World Mythology
- Creation and Regeneration Myths
- Cult of Deities, Heroes & Animals
- Space , After Life , Time and End of Times

Registrations close on 20th December 2018 FOR REGISTRATION: CONTACT AIC DEPT.

Minimum 30 hours duration

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ENGLISH

TRANSLATION, CHILDREN'S LITERATURE & TRAVEL WRITING

Honours Activity 2018-2019
Course Instructor: VANI ZAVERI

This course aims to

- trace the origins and development of Children's Literature, ranging from its beginnings in eighteenth-century chapbooks and fairy tales, through seminal nineteenth-century novels, to contemporary examples of fiction illustrating current trends.
- nuances and fine details of the new age travel writing genre and enhancing the student's ability to put into words what usually ends up as just a visual memory of a destination.
- look at translation strategies and the creative potential beyond the creation of translated text.

Registrations close on 20th September 2018 FOR REGISTRATION: CONTACT Ms. Pearl Pastakia.

COURSE FEE: Rs. 1200/-



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF PSYCHOLOGY

No of credits: 2 (30hrs or more)

Research Paper Writing and Presentation at Khandala Seminar on Individual and group differences 2018–19

- The Psychology department of St. Xavier's College, Mumbai has been organizing an annual seminar for their undergraduate students for over 25 years. This co-curricular activity is open to FY, SY and TY students of the department and is held over 2 days (in a venue away from college). Individual students choose to present papers in keeping with a broad theme (that is selected after brainstorming with students). Some of the themes explored include Controversies in Psychology, An interdisciplinary approach to Psychology, Personality theorists, Human sexuality, Application of psychology to current events and phenomena.
- A broad theme is agreed upon after brainstorming with students. Each student chooses a specific topic (within that theme) to write their seminar paper on.
- They receive a two hour initial training on how to decide on specific topic for their seminar
 paper. They are taught basic research and reference skills. Then students need to work on
 their own time (involving more than 15 hours of work, usually during the diwali vacation)
 to create a literature review and outline for their paper.
- They will consult with the teaching staff (they have chosen as their guides) to organize and
 refine their written paper to be submitted. Final year students who have had experience
 with this activity are also available to mentor the students doing this for the first time.
- Enrolled students also receive one hour training on effective presentation skills before the seminar.

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF MANAGEMENT STUDIES

Honours Course on Technical Analysis of Stocks 2018-19

Name of Instructor: Mr. Sagar Taekar

Total number of classroom training: 18 hrs + 12hrs assignment

Total -30 hrs

No. of Credits Offered: Two (30hrs)

- Course Content
- Difference between Technical & Fundamental Analysis
- Understanding of important financial terms & categorization of stocks
- Candlestick patterns
- Maximum intake: 40
- · Last Date for registration:
- To register, contact Mr. Pritesh Arte



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St. Xavier's College (Autonomous), Mumbai PG Department of Biotechnology

Honours Programme Activity:

Embryonic tissue culture: A Primer for Animal Cell Culture techniques.

Course Content:

Hands-on training in animal cell culture techniques using chick embryo tissues (Initiation of primary culture, Characterization and Application). The course will focus on practical aspects of cell culture, like design and layout of the laboratory, aseptic technique, methods for measuring viability, cell culture environment and the culturing of cells from primary tissue.

Credits: 2

Duration: Orientation - Wednesday 10th September 2018 between 3.00pm - 4.00pm.

Course Schedule: 22nd October -27th October 2018 OR after ESE exams of Semester IV/VI

Eligibility: SYBSc and TYBSc students (Biological Sciences only)

No of Seats: 10

Fees: Rs 2500/-

Contact: Dr. Shiney Peter shiney.peter@xaviers.edu





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St. Xavier's College (Autonomous), Mumbai PG Department of Biotechnology

Honours Programme Activity : Finding Hidden Messages in Biomolecules: Bioinformatics Approach

Course Content:

A hands-on practical session combined with theory sessions, aims to determine the role of computers in decoding the messages in DNA and proteins. The course will include introduction to the biomolecules followed by a detailed exploration of various biological databases, analysis of biomolecular data using various tools like BLAST, Clustal Omega, Rasmol, Swiss Model, and others and a detailed practical session on in silico experimentation of biological and chemical science. When you complete this course, you will be able to understand basic utilization of computational tools for answering some biological and chemistry-based problems

Credits: 2

Duration: October- February 2019 (once a week)-Orientation: Wednesday 12th September 2018 between 3.00pm - 4.00pm, (The course schedule will be decided on 12th Sept 2018)

Eligibility: SY science students (Preference will be given to the students with Biology and Chemistry at the FY level)

No of Seats: 15

Fees: Rs 1000/-

Contact: Ms. Norine D'Souza norine.dsouza@xaviers.edu/

Dr. Shiney Peter shiney.peter@xaviers.edu



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St. Xavier's College (Autonomous), Mumbai PG Department of Biotechnology

Honours Programme Activity: Bioinformatics: Solution to the Biological Problems.

Course Content:

The session includes utilization of various bioinformatics/computational tools in answering the question of biological sciences. The module will be a lecture cum practical sessions. The students will be trained to design a biological based question/problem in the initial classroom session. After the designing the problem/ project students will be guided through to use different computational biology tools to solve the problem. The students will be allowed to choose the subject based on their interest pertaining to biological sciences. The areas included in the module will be protein study, basic molecular biology and biochemistry

Credits: 2

Duration: October- March 2019 (once a week)-Orientation: Wednesday 12th September 2018 between 3.00pm - 4.00pm, (The course schedule will be decided on 12th Sept 2018)

Eligibility: TY Biological science students (An induction session will be conducted for the students without any bioinformatics background)

No of Seats: 12

Fees: Rs 1000/-



Contact: Ms. Norine D'Souza norine.dsouza@xaviers.edu/

Dr. Shiney Peter shiney.peter@xaviers.edu



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Morphology and identification of Fruits &vegetables
Honours Activity (2 credits) 2018-2019
Professor - in - Charge: - Dr. Rajendra Shinde

- This activity will help you to develop plant identification skill. It will motivate participants in taxonomical identification of the plants used on a daily basis eg. Fruits & vegetables.
- Evaluation will be done on the basis of written report.
 Commencing from Date: 8th Oct 2018-13th Jan 2019
 Maximum Intake: 5

Last date for Registration: 1st September 2018
To register, contact The Botany Department



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY 2018-2019

Honours Project on Extraction of oils from botanical samples
Mr. Kevin D'Cruz

No. of Credits Offered: Two (30hrs)

- Oil can be extracted from plant materials in various ways. There is hydro distillation, cold pressing and microwave distillation. Students will learn to extract oils from orange peels, lemon grass and mint leaves.
- The goal of the course is to equip and motivate the participants with advanced techniques. Evaluation will be done on the basis of their skill for setting up the apparatus, harvesting of the essential oil and written report.

Maximum Intake: 10

Last date for Registration: 15th July 2018

To register, contact The Botany Department



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Honours Open Ended Project 2018-19
Phylogenetic tree of the chitinase enzyme present in various plants using FASTA code.

Mr. Alok Gude

No. of Credits Offered: Two (30hrs)

The prime aim of this project is to develop Bioinformatics research skills.

The process includes collection of FASTA code of chitinase from the NCBI website of various plant species. FASTA format is a text-based format for representing either nucleotide sequences or peptide sequences, in which base pairs or amino acids are represented using single-letter codes. A sequence in FASTA format begins with a single-line description, followed by lines of sequence data. After the FASTA codes are retrieved for many plants, by the help of online softwares like NCBI BLAST and MEGA and used to create a phyllogentic tree of the chitinase enzyme, thereby helping to analyse the importance of the phyllogenetic tree

Maximum Intake: 5

Last date for Registration: 30th July 2018

To register, contact The Botany Department



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Conserving Artefacts: A Chemical View

Professor –in– Charge: Dr. Ashma Aggarwal, Dr. Geeta Kotian and Ms. Saima Khan

Honours 2 credits Activity 2018-2019

- Students will be introduced to the essential role chemistry plays in conservation of art and artefacts through lecture series followed by hands on experience on simple artefacts. Through these lectures, students will be made aware of the importance of various parameters that have to be taken care of during conservation process. They will also be shown various ways to restore and preserve the treated artefacts.
- Includes lectures as well as hands-on sessions.
 - Level of Students: F.Y.B.Sc./ S.Y.B.Sc.
 - Total No. of Students: 10
 - Deadline for application: 15th July, 2018
 - · Assessment method: Project Report

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Research Project in Metal oxide semiconductors as effective photocatalyst: pros and cons

Professor –in– Charge: Dr. Ashma Aggarwal

Honours 2 credits Course 2018-2019

Metal oxide semiconductors have proved to be effective photocatalysts and hence are in great demand specially in waste water treatment. To label this treated water as potable, it needs to be analyzed extensively in terms of its potency as well as various other factors. This activity will involve synthesis of metal oxide semiconductors, their use as effective photo-catalysts and possible use of treated waste water by analyzing its toxicity through various tests.

Level of Students: F.Y.B.Sc./ S.Y.B.Sc.

Maximum Intake: 6 students

Deadline for application: 15th July, 2018

· Assessment method: Project Report



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Complex Chemistry

Professor –in– Charge: Dr. Geeta Kotian and Ms. Saima Khan Honours Research Project (2 credits) 2018-2019

The project will involve practical work. 2 Schiff bases will be synthesized and each Schiff base will then be complexed with different metals. The Schiff bases will also be characterized by chemical method. The complexes prepared will then be characterized by chemical methods.

Level of Students: F.Y.B.Sc./ S.Y.B.Sc.

Maximum Intake: 6 students

Deadline for application: 15th July, 2018

· Assessment method: Project Report

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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Honours Research Project in Food and Environmental Chemistry 2018-2019

Prof. In-charge – Dr. Pralhad Rege

The prime aim of this project will be to evaluate aspects of food and environmental chemistry from perspective of safety and wellbeing of mankind. The project will mainly be divided into two parts. In Water analysis, various water samples from the different parts of Mumbai will be evaluated for different essential parameters (According to The Environmental Protection Agency Act, 1992) like Acidity, Alkalinity, Salinity, Dissolved Chlorine, TDS, Sulphate, COD, BOD, DO, Nitrite Content and Fe Content.

In food analysis, qualitative analysis of commercial brands of cold drinks will be done by instrumental and non-instrumental methods. Parameters like pH, carbon dioxide, glucose, phosphate, Alcohol and Sucrose content will be checked and a comparative study will be carried out.

Evaluation will be done on the basis of written project report.

Duration: 08-10 weeks

Deadline for application: 10th August, 2018

Level of students: FYL SYBSc No. of students: 15

Assessment method: Written Project Report

Contact: Dr. Pralhad Rege





ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF CHEMISTRY

Workshop: Applications of Chem-Draw- A tool in Chemistry

Professor –in– Charge: Dr. Sandip R Kale Honours 2 credits activity 2018-2019

- ChemDraw is software which enables user to edit molecule, make structures, and formulate reactions. The drawing of chemicals structures and reaction schemes is a repetitive task for all the chemists on all levels of education. While hand-sketching is generally used for presentation, journals, etc. these ways aren't neat and making in symmetry is difficult. Hence to make structures, several computer software's are used, one of the most efficient software being ChemDraw. ChemDraw is available for Windows as well as MAC.
- Topics to be covered in the course are: Chem Draw basics, drawing techniques, analysis tools, drawing chemical structures, captions and atom labels, orbital's, symbols and other shapes, use of TLC plate tool, prediction of ¹HNMR and ¹³C NMR, drawing reactions and their mechanism, sharing ChemDraw information.
 - Level of Students: F.Y.B.Sc./ S.Y.B.Sc.
 - Total No. of Students: 10
 - Deadline for application: 20th July, 2018
 - · Assessment method: Test

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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2018-19 offered by Caius Research Laboratory

Research Methodology And Analytical Techniques (Basic)

Course comprises designing experiments and learning techniques in Research Methodology

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15, Course Fees: Rs -1500 (Basic)/-

Evaluation: Continuous and submission of report

Duration: 29th October to 3rd November 2018 - 9:30am - 5pm every day, Attendance

compulsory on every day.

Faculty Incharge: Dr. Priya Sundarrajan (email: priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2018-19 offered by Calus Research Laboratory Research Methodology And Analytical Techniques (Advanced)

Course comprises designing experiments and learning techniques in Research Methodology Involves Techniques of Gene Cloning and Protein Crystallisation

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15, Course Fees: Rs -2500/- (Advanced)

Evaluation: Continuous and submission of report

4th April to 10th April 2018 - 9:30am - 5pm every day, Attendance compulsory on every day.

Faculty Incharge: Dr. Priya Sundarrajan (email: priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry



QEP COURSE (2018-2019)

Mapping the Microscopic Biodiversity using Paper Microscope 'Foldscope'

Students will work on a Department of Biotechnology (DBT), Government of India, funded-project that involves using paper microscopes called 'Foldscopes' to photo-document the diversity microscopic flora and fauna from different ecological niches. The project will involve field visits to national and nature parks in and around Mumbai, on Sundays and public holidays (twice a month, on an average).

Class: SY BSc.

No. of Students: 06

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work)

Evaluation: Written Report submission

Course conducted by:

Dr. Maya Murdeshwar
In association with Dr. Sujata D
(Department of Zoology)

Course Fees Rs. 500/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai

Department of Life Science and Biochemistry



QEP COURSE (2018-2019)

Estradiol-mediated Development of Retina in Chick Embryo System.

To study how the retina develops and neurogenesis occurs at various stages of embryonic development under the influence of estradiol treatment. Techniques involve histological analysis using microtomy and silver staining of the retina.

Class: SY BSc.

No. of Students: 06

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work)

Evaluation: Paper presentation and project report.

Course conducted by:

Dr. Radhika Tendulkar

Course Fees Rs. 2000/-

Contact Department of Life Science and Biochemistry for more details



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF MICROBIOLOGY

Honours Activity on Animal tissue culture 2018-2019

- Animal tissue culture is a major tool in basic research as well as in modern medicine. Some of the
 important areas in which cell culture plays a key role are cancer research, toxicity testing, virology,
 immunology, cytogenetics, stem cell biology, drug screening and gene therapy. The workshop is
 designed to provide a thorough understanding of this technique through theory sessions and
 laboratory exercises.
- Course content The course will focus on practical aspects, such as design and layout of the cell
 culture laboratory, aseptic techniques, media preparation, methods for measuring viability, subculturing, cryopreservation, revival and cytotoxicity.
- This course will be conducted for six to eight days -six to seven hours per day. Students will be
 assessed on day to day performance and one written exam on practical aspects of the course at the
 end.

Registrations open till 10th March 2019.

Contact Dr. Sangeeta Chavan, Dept. of Microbiology



St. Xavier's College (Autonomous), Mumbai Diploma in Forensic Science and Criminal Law 2018-2019 Department of Zoology

- The course has been formulated with the aim, to provide an introduction and orientation to the functioning of the Indian Criminal Justice delivery system, and the role forensic science plays in this process. With the use of case studies, mock crime scenes and various practicals, it gives the students the opportunity to hone the basic skills necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security, Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science and the law.
 - · Admissions for the July 2018 to April 2019 batch are open.
- Eligibility Criteria Minimum HSC certificate or equivalent with a 60% grade (Pre-requisite: Arts (Psychology), Science or Law)
 - · Selection Method: Merit based & Interview
 - · Duration and Timings: One Academic year (July to April)
 - · Timings: 4:00 pm 7:00 pm Monday, Tuesday & Wednesday

Course Fees: Rs. 27,000 +200/-

· Faculty Members

Dr. Pushpa Sinkar, M.Sc., Ph.D (pushpa.sinkar@xaviers.edu)
Ms. Alethea Vaz, M.Sc. (alethea vaz@xaviers.edu)
Ms. Riva Pocha, M.Sc. (riva.pocha@xaviers.edu)



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ZOOLOGY

Honours Activity on Evolution 2018-2019

Name of Instructor: Mr. Conrad Cabral
No. of Credits Offered: Two (minimum 30hrs)

- Understanding of Evolution is the core for our progress as a civilization in the field of Science.
- The course is designed for science students to help understand better the concept of evolution and the importance of evolution in the development of science – be it in the field of medicine, agriculture, engineering etc and most important, understanding our connection to other living organisms.
- The course will cover topics like: Evidences for evolution, factors affecting
 evolution, human evolution, the critique of intelligent design and
 creationism. It will equip the student with a holistic understanding of
 Evolution and not just a theory that has no concrete applications.

Open to students of biological sciences

Maximum Intake: 25

Last date for Registration: 15th July 2018 To register, contact Mr. Conrad Cabral



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI <u>DEPARTMENT OF ZOOLOGY</u>

Honours Activity 2018-2019

Basic Skills In Wildlife Filmmaking

Name of Instructor: Harshit Singh No. of Credits Offered: Two (30hrs)

- It is a two credit, lecture + practical course open to students of all the disciplines.
- · The course will introduce the students to the following:
- understanding practices involved in wildlife film production, how to combine the ends of science and media to create films that are successful, how to be meaningful to both the entertainment industry and the cause of wildlife and scientific learning.
- The course will involve a combination of 5 lectures and practical sessions that lead up to students creating, based on choice, their own 1- minute long wildlife action sequence or a production recce report.

Maximum Intake: 15

Last date for Registration: 15th July 2018

To register, contact the Zoology Department



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ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI
Dept. of Ancient Indian History, Culture and Archaeology
CERTIFICATE COURSE IN

STUDY OF CHICKRIPHY AND PUMISMATICS OF INDIA 2017-2018

- · Are you interested in learning about the scripts and coins of ancient India....
 - Would you like to utilise current sources to reconstruct the past!

This course will deal with Literary, Archaeological, Numismatic and Epigraphic evidences for a holistic view of the facets of Indian culture.

- Introduction to Epigraphy Ancient Indian Scripts Introduction to Numismatics
- Coinage of Janapada (PMC & EUCC), Indo-Greek-Parthian- Scythian, Western Ksatrapas, Kushan, Satavahana, Tribal coins, Gupta, Pallavas, Chola and Cheras, Delhi Sultanate and Greater Mughal Coins.
- Registration closes on 30th Nov. 2017
- Course commences in January 2018.
- · No of credits: 2 (30hrs or more)

For Details contact AIC Department.





St. Xavier's College (Autonomous), Mumbai
Dept. of Ancient Indian History, Culture and Archaeology
Presents
a lecture series on

"Mother Earth and Her Secrets of Sustainability"
An Honours Activity

2017-2018

Ms. Kaumudi Malladi

Architectural Designer and Social Historian

The Lecture series will focus on theories of origin of life on earth, knowledge systems of ancient civilizations like Indus valley civilization, Mesopotamia, Egypt, Greeks-with reference to Mother-goddess ,socio-religious parameters of Byzantine and Gothic, the Renaissance ,contemporary and perspectives and sustainability .

Dates: - 13th to 23rd November 2017 (10 days) Time: -2:30pm-5:30pm Fees: Rs. 350

Quest for Excellence (QEP) credit (30 hours) will be awarded to those who complete the course requirements of attendance, assignments and test.

For Registration please contact:- Dr. Anita Rane- Kothare (HOD), Dr. Radha Kumar(radha.kumar@xaviers.edu),

Mr. Jason Johns (9833196477)

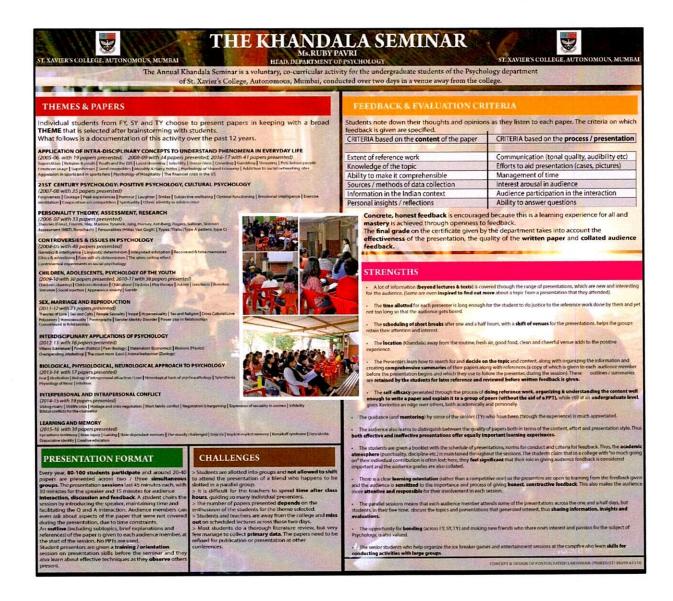
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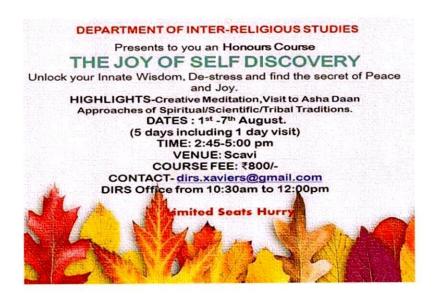


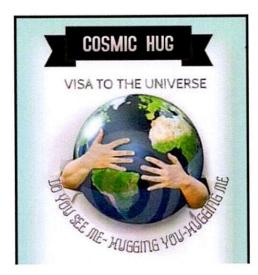


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ST. XAVIER'S COLLEGE(AUTONOMOUS), <u>MUMBAI</u>





Hi Compassionate Beings,

Come to receive & give the Cosmic Hug, Feel your interconnection with All.

Date: 26th - 28th at Dahanu Contact: dirs.xaviers@gmail.com or visit the DIRS Office from 10:30am-12:30pm

Limited Seats!!

Last date to register: 18th Aug Charges: Rs.800 plus stay



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St. Xavier's College (Autonomous), Mumbai Department of Mass Media Honours Activity 2017-2018



Sports Business Management Certificate Course

- Pyramid Sports is a Sports Management Company, established with the purpose of shaping the sports industry and being a part of sport defining the business landscape in India.
- Topics like the Commonwealth Games, the Indian Grand Prix case study, as well as the prospective merging of the I-League and the ISL will be discussed in the context of the modules.
- The course also allows students a chance to interact with prominent companies and be presented with opportunities for volunteering and work experiences.

Course Aims

- Help students acquire a fundamental knowledge and understanding of the sports business
- Examine how the sports business is a peculiar type of business
- How to manage sports events and volunteers
- The importance of branding, marketing and communications within sports businesses
- · Identifying good leadership, management, and corporate governance in sport

Salient Features of the Course :

- > 30 Taught/Assessment Hours
- > 4 Modules
- Weekend Classes
- Held at St. Xavier's College, in partnership with the Mass Media Department
- Internship and Volunteering Opportunities at Partner Companies

Registrations open till 15th Sept 2017. Contact Dept. of Mass Media Prof. Akshara Jadhav

Event Management | Infrastructure Development | Education | Consultation | Tourism





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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY HONOURS ACTIVITY 2017-18



"FINDING HIDDEN MESSAGES IN BIOMOLECULES": BIOINFORMATICS APPROACH

Hands on practical sessions combined with theory sessions, aims to determine the role of computers in decoding the messages in DNA and proteins. The course will include introduction to the biomolecules followed by a detailed exploration of various biological databases, analysis of biomolecular data using various tools like BLAST, Clustal Omega, Rasmol, Swiss Model, and

others and a detailed practical session on in silico experimentation of biological and chemical science. When you complete this course you will be able to understand basic utilization of computational tools for answering some biological and chemical based problems.

Eligibility: SY and TY science students (Preference will be given to the students with Biology

and Chemistry at the FY level)

Total No of seats: 15

Content offered:

Activity fee: INR 1000

Duration: 30 hours (scheduled between October 2017 and March 2018-)

Last date of registration: 30th August 2017

Contact Person: Ms. Norine D'Souza, Department of Biotechnology/norine.dsouza@xaviers.edu





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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY HONOURS ACTIVITY 2017-18



PRIMARY TISSUE CULTURE USING CHICK EMBRYO

Content: Hands-on training in cell culture techniques using chick embryo tissues (primary culture and its characterization)

Learn Handling of embryos to setting up cultures *invitro* and its applications in a fully equipped Animal Cell Culture Facility.

Eligibility: SYBSc and TYBSc students (Biological Sciences only)

Total No of seats: 10

Activity Fees: Rs.2500/-

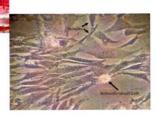
Last date for registration: 30th August 2017

Commencement of course: 1 week in February 2018 (12th -17th February 2018) OR after ESE

exams of Semester II 2018



Contact: Dr Shiney Peter, Assistant Professor,/ shiney.peter@xaviers.edu





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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Honours Activity 2017-2018

Morphology and identification of vegetables (2 credits)
Professor - in - Charge: - Dr. Rajendra Shinde

- This activity will help you to develop plant identification skill. It will motivate participants in taxonomical identification of the plants used on a daily basis eg. vegetables.
- Evaluation will be done on the basis of written report.

Commencing from Date: 7th Oct 2017-13th Jan 2018

Maximum Intake: 5

Last date for Registration: 30th September 2017

To register, contact The Botany Department



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Digitisation of Botanical specimens 2017-2018

Professor – in – Charge: - Mr. Kevin D'Cruz

Honours Activity 2 Credits (minimum 30 hrs.)

- This activity will help you to develop digitization skills.
 It will motivate participants with advanced techniques for digitisation of permanent slides of botanical specimens.
- Evaluation will be done on the basis of their skill for microscopic photography and written report.

Commencing from Date: 4th Oct 2017-24th Mar 2018

Maximum Intake: 5

Last date for Registration: 30th September 2017

To register, contact The Botany Department





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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF BOTANY

Determining optimal pH for the synthesis of silver nanoparticles using black tea extract 2017-2018 Prof.- in- Charge: Mr. Alok Gude. Honourse Research Project 2 Credits

- This activity will involve experimentation to determine optimal pH range for the process of silver nanoparticle synthesis using tea.
- Evaluation will be done on the basis of written project report.

Commencing from Date: 2nd Oct 2017 -24th Mar 2018

Maximum Intake: 5

Last date for Registration: 30th September 2017

To register, contact The Botany Department



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI

DEPARTMENT OF CHEMISTRY

Chemistry in Art Honours Course 2017-18 Dr. Geeta Kotian and Saima Khan

No. of Credits Offered: Two (30hrs)

This course explores the relationship between chemistry and art. We will look at the history and aesthetics of artefacts to study the science in art and art in science. The course will include lectures and lab work. Students will be assessed on the basis of written assignment and lab work.

To register, contact: geeta.kotian@xaviers.edu or saima.khan@xaviers.edu Eligibility: F.Y.B.Sc. /S.Y.B.Sc. Chemistry students







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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2017-18 offered by Caius Research Laboratory Research Methodology And Analytical Techniques (Basic)

Course comprises designing experiments and learning techniques in Research Methodology

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15; Course Fees: Rs-1500 (Basic)

Evaluation: Continuous and submission of report

Duration: 26th October to 1st November 2017- 9:30am - 5pm every day, Attendance

compulsory on every day.

Faculty Incharge: Dr. Priya Sundarrajan (email: priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



St. Xavier's College(Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2017-18 offered by Caius Research Laboratory

Research Methodology And Analytical Techniques (Advanced)

Course comprises designing experiments and learning techniques in Research Methodology Involves Techniques of Gene Cloning and Protein Crystallisation

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15, Course Fees: Rs- 2500 (Advanced)

Evaluation: Continuous and submission of report

Duration: 5th to 13th April ,2018- 9:30am - 5pm every day, Attendance compulsory on every

day.

Faculty Incharge: Dr. Priya Sundarrajan (email:priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry QEP COURSE (2017-2018)



Experimental Activity: Vertebrate embryonic development - creating a developmental atlas using whole mounts of Chick and Zebrafish embryos.

Students will get an opportunity to familiarize themselves with vertebrate model organisms and understand gross morphological milestones in development during embryogenesis. Evaluation will be based on the lab work and the report compiled.

Class: FY BSc.

No. of Students: 03

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work) Evaluation: Continuous Evaluation and Report submission

Course conducted by:

Dr. Radhika Tendulkar

Course Fees Rs -1500/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbal Department of Life Science and Biochemistry QEP COURSE (2017-2018)



Experimental Activity: Does Estradiol regulate retinal development and neuro-genesis?

Students will design and perform experiments to understand Estradiol-mediated neurogenesis in the developing chick embryo system. Students will be assessed on experiment design, lab work, paper presentation and written report

Class: SY BSc.

No. of Students: 05

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work) Evaluation: Continuous Evaluation and Report submission

Course conducted by:

Dr. Radhika Tendulkar

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry QEP COURSE (2017-2018)



Experimental Activity: Mapping the microscopic biodiversity of Sanjay Gandhi National Park, Mumbai.

Students will be exposed to research methodology through sample collection, handling and microscopic analysis using foldscope. Students will have to consolidated their observations into a scientific report for evaluation.

Class: SY BSc.

No. of Students: 07

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work) Evaluation: Continuous Evaluation and Report submission Course conducted by:

Dr. Maya Murdeshwar
In association with Dr. Sujata D
(Department of Zoology)

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbal
Department of Life Science and Biochemistry

QEP COURSE (2017-2018)



Experimental Activity: ROS studies in yeast.

The aim of the study is to understand ethanol induced reactive oxygen species in yeasts and effect of antioxidants on ROS production. Students are expected to design experiments, perform them, document results and submit a scientific report.

Class: SY BSc.

No. of Students: 05

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work) Evaluation: Continuous Evaluation and Report submission Course conducted by:

Dr. Binoj Kutty

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF MICROBIOLOGY

Honours Activity on Animal tissue culture 2017-2018

- Animal tissue culture is a major tool in basic research as well as in modern medicine. Some of the important areas in which cell culture plays a key role are cancer research, toxicity testing, virology, immunology, cytogenetics, stem cell biology, drug screening and gene therapy. The workshop is designed to provide a thorough understanding of this technique through theory sessions and laboratory exercises.
- · Course content The course will focus on practical aspects, such as design and layout of the cell culture laboratory, aseptic techniques, media preparation, methods for measuring viability, subculturing, cryopreservation, revival and cytotoxicity.
- This course will be conducted for six to eight days -six to seven hours per day. Students will be assessed on day to day performance and one written exam on practical aspects of the course at the

Registrations open till 15th March 2018.

Contact Dr. Sangeeta Chavan Dept. of Microbiology



St. Xavier's College (Autonomous), Mumbai Diploma in Forensic Science and Criminal Law 2017-2018 Department of Zoology

The course has been formulated with the aim, to provide an introduction and orientation to the functioning of the Indian Criminal Justice delivery system, and the role forensic science plays in this process. With the use of case studies, mock crime scenes and various practicals, it gives the students the opportunity to hone the basic skills necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security, Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science and the law.

Admissions for the July 2017 to April 2018 batch are open.

- Eligibility Criteria Minimum HSC certificate or equivalent with a 60% grade (Pre-requisite: Arts (Psychology), Science or Law)
 - Selection Method: Merit based & Interview
 - Duration and Timings: One Academic year (July to April)
 - · Timings: 4:00 pm 7:00 pm Monday, Tuesday & Wednesday
 - Fees: Course Fees: Rs. 27,000 + 200/-

· Faculty Members

Dr. Pushpa Sinkar, M.Sc., Ph.D (<u>pushpa.sinkar@xaviers.edu</u>) Ms. Alethea Vaz, M.Sc. (<u>alethea.vaz@xaviers.edu</u>) Ms. Riva Pocha, M.Sc. (<u>riva.pocha@xaviers.edu</u>) Ms. Sejal Gupta, M.Sc. (<u>sejal.gupta@xaviers.edu</u>)



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ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ZOOLOGY

Honours Activity 2017-18

Introduction to BEES: (Behavioural, Ecological and Evolutionary Sciences)

- TWO CREDITS (Dr. Sujata Deshpande)
- · Lecture + Project Course.
- This is an interactive course, where a small part will be covered by conducting lectures to introduce the students to the basics of measuring animal behaviour and relating behaviour to ecology and evolution. For the remaining major part, the students will be divided in groups and will be asked to undertake projects in the field of behaviour and ecology. Basis for awarding credits: Attendance, Performance in doing the projects, Presentation, Project report.
- Open for biological science students of SY and TYBSc
- Number of students: 10
- Every Friday :- 3:45 5:00 pm
- Every Saturday :- 3:00 5:00 pm

Commencing from 29th July 2017



ST. XAVIER'S COLLEGE(AUTONOMOUS), MUMBAI DEPARTMENT OF ZOOLOGY

ORNITHOLOGY AND HERPETOLOGY

Honours Activity 2017-2018

TWO CREDITS (Dr. Leon Pereira)

A lecture course cum field visit conducted on "Ornithology and Herpetology". Students will learn about the Taxonomy, Classification and Biology of Reptiles (Snakes) and Birds through lectures and field trips. The students will be graded on the basis of a field report and overall performance and participation during the course.

SY and TYBSc Zoology students can apply for this course.

Field trip will be charged separately

Every Thursday: - 3.30-5.00 pm

Commencing from 27th July 2017



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2016 - 2017



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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

CERTIFICATE COURSE IN

STUDY OF EPIGRAPHIC AND NUMISMATICS OF INDIA

No of credits: 2 (30hrs or more)

- Are you interested in learning about the scripts and coins of ancient India....
 - Would you like to utilise current sources to reconstruct the past!

This course will deal with Literary, Archaeological, Numismatic and Epigraphic evidences for a holistic view of the facets of Indian culture.

- Introduction to Epigraphy Ancient Indian Scripts Introduction to Numismatics
- Coinage of Janapada (PMC & EUCC), Indo-Greek-Parthian- Scythian, Western Ksatrapas, Kushan, Satavahana, Tribal coins, Gupta, Pallavas, Chola and Cheras, Delhi Sultanate and Greater Mughal Coins.
- Registration closes on 30th Nov. 2016
- Course commences in January 2017.

For Details contact AIC Department.

2016-2017



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

HISTORY OF PERFORMING ARTS AND THEATRE IN INDIA

No of credits: 2 (30hrs or more)

Study the essence of Ancient Indian culture!

Let's take a look at the synergy between fluid and static arts, and broaden their horizon.

- Understand the elements of Music- Nad, Shruti, Swara, Saptak.
- Study the Structure of a Raga- Genesis- Tat, Jati, Vadi, Samvadi, Varjit Swara, Samay Chakra, the importance of Tala (Both Carnatic and Hindustani) and constituents of Khyal and Gath in Instrumental music.
- Study of the elements and structure of Dance.:- The concept of Nritta, Nrithya and Natya.
- Study of Abhinaya- Angika, Vachika, Aharaya and Sattvika.

Registrations close on 31st August 2016 FOR REGISTRATION: CONTACT AIC DEPT.

2016-17

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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

Maritime Heritage of Ancient India No of credits: 2 (30hrs or more)

- This course will help to understand the maritime tradition which existed in India from the proto-historic period.
- · Maritime Trade in early India.
- Ports and Ship yards and types of ship on the western and the eastern coast of India. (Marine archaeology)
- River Economy
- Trading centers and merchant guilds.
- Trade and river system in Northern, Central, Deccan and South India.
- Trade In Early Medieval Period
- Trade with South and South East Asia. East Asian Trade and Early European Trade

Registrations close on 15th December 2016

COURSE DURATION 45 hours

FOR REGISTRATION: CONTACT AIC DEPT.

2016-2017



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

Brief study of the Comparative Mythology of the World.

- Study of Mythologies of world civilizations.
- Understanding various classifications of myths.
- Comparative analysis of Indian and world mythologies
- Introduction to World Mythology
- Creation and Regeneration Myths
- Cult of Deities, Heroes & Animals
- Space , After Life , Time and End of Times.

Registrations close on 15th December 2016 FOR REGISTRATION: CONTACT AIC DEPT.

No of credits: 2 (minimum 30hrs)



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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF PSYCHOLOGY

Honours Activity No of credits: 2 (30hrs or more)

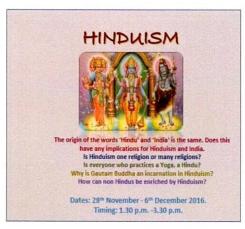
Research Paper Writing and Presentation at Khandala Seminar on APPLICATION OF PSYCHOLOGY TO CURRENT EVENTS/PHENOMENA 2016-17

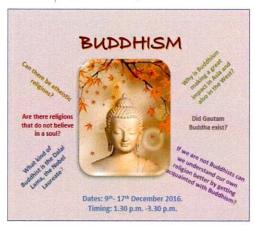
- The Psychology department of St. Xavier's College, Mumbai has been organizing an annual seminar for their undergraduate students for over 25 years. This co-curricular activity is open to FY, SY and TY students of the department and is held over 2 days (in a venue away from college). Individual students choose to present papers in keeping with a broad theme (that is selected after brainstorming with students). Some of the themes explored include Controversies in Psychology, An interdisciplinary approach to Psychology, Personality theorists, Human sexuality, Application of psychology to current events and phenomena.
- A broad theme is agreed upon after brainstorming with students. Each student chooses a specific topic (within that theme) to write their seminar paper on.
- They receive a two hour initial training on how to decide on specific topic for their seminar
 paper. They are taught basic research and reference skills. Then students need to work on
 their own time (involving more than 15 hours of work, usually during the diwali vacation)
 to create a literature review and outline for their paper.
- They will consult with the teaching staff (they have chosen as their guides) to organize and
 refine their written paper to be submitted. Final year students who have had experience
 with this activity are also available to mentor the students doing this for the first time.
- Enrolled students also receive one hour training on effective presentation skills before the seminar.



ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF INTER RELIGIOUS STUDIES (DIRS)

2 Credits (30hrs or more) HONOURS ACTIVITY 2016-2017





Contact the Department of Interreligious Studies(DIRS) Office 9.30a.m. to 1.30. p.m. or <dirs.xaviers@gmail.com>



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St. Xavier's College (Autonomous), Mumbai Department of Mass Media Honours Activity 2016-2017



Sports Business Management Certificate Course

- Pyramid Sports is a Sports Management Company, established with the purpose of shaping the sports industry and being a part of sport defining the business landscape in India.
- Topics like the Commonwealth Games, the Indian Grand Prix case study, as well as the prospective merging of the I-League and the ISL will be discussed in the context of the modules.
- The course also allows students a chance to interact with prominent companies and be presented with opportunities for volunteering and work experiences.

Course Aims:

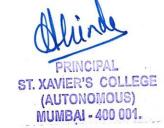
- Help students acquire a fundamental knowledge and understanding of the sports business
- · Examine how the sports business is a peculiar type of business
- · How to manage sports events and volunteers
- · The importance of branding, marketing and communications within sports businesses
- Identifying good leadership, management, and corporate governance in sport

Salient Features of the Course :

- 30 Taught/Assessment Hours
- > 4 Modules
- Weekend Classes
- Held at St. Xavier's College, in partnership with the Mass Media Department
- Internship and Volunteering Opportunities at Partner Companies

Registrations open till 15th Sept 2017. Contact Dept. of Mass Media Prof. Akshara Jadhav or email to info@pyramidsportsindia.com Course fees: 15,000/-Rs







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ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF BOTANY

Honours Activity 2016-2017 Permanent slide preparation (2 credits)

Professor - in - Charge: -Mr. Kevin D'Cruz

This activity will train students in permanent slide preparation It will equip and motivate the participants with advanced techniques in slide preparation.

Evaluation will be done on the basis of skill for making permanent slide and written report.

Max. Intake 08 Interdisciplinary - FY, SY, TYBSc

Registrations close on 31st July 2016





ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF BOTANY

Honours Activity 2016-2017 Open Ended Research Project (2-credit)

Professor - in - Charge: Mr. Alok Gude

This activity will train students in research. Topics to be undertaken are

- Determination of the growth rate of pollen tubes in Allamanda.
- · Determination of optimum conditions for pollen tube growth.
- Study of in-vitro pollen germination process as a whole.
- · Evaluation will be done on the basis of written project report.

Max. Intake 05 Registrations close on 31st July 2016

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ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project 2016-17
Synthesis and Isolation of some Organic Compounds: An
Analytical Approach

Professor - in - Charge: - Dr. Ashma Aggarwal and Dr. Gulshan Shaikh

Some of the most commonly used reagents are simple organic compounds which can be synthesized easily in laboratories. Their natural counterparts can also be used as substitutes under given conditions. Many of the organic compounds generally used are biochemical compounds / molecules which can be easily isolated from natural sources. In the present activity, synthesis, isolation and characterisation of some of these compounds will be carried out. Along with this some alternate economically viable methods for their synthesis will also be studied.

- Evaluation will be done on the basis of labwork, viva-voce and report.
- Activity will be conducted from 20th Oct to 1st week of Nov 2016.

No of credits: 2 (30hrs or more)

Maximum Number of Students: 15

Registrations open.

For details contact Dr. Ashma Aggarwal- Chemistry Dept.



ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project in Pharmaceutical Chemistry 2016-17

No of credits: 2 (30hrs or more)

Dr. Pralhad Rege and Dr. Ashma Aggarwal

- Learn methods for antibiotic drug formulation using spectrophotometric technique that can be used for routine quality control and quantitative determination from different antibiotic pharmaceutical drug formulation. The activity will also cover:
- Analytical method Validation using ICH guidelines
- Statistical calculations
- Quantification by using Simultaneous Equation and Absorbance Ratio Method.

Evaluation will be done on the basis of written project report.

Registrations open.

Open to FY, SY, TYBSc

Maximum Intake: 10

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ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project in Food and Environmental
Chemistry 2016-2017

Prof. In-charge - Dr. Pralhad Rege and Dr. Gulshan Shaikh

The project will evaluate safety of food and water.

Water samples from different parts of Mumbai will be collected and evaluated for essential parameters (According to The Environmental Protection Agency Act, 1992) such as Acidity, Alkalinity, Salinity, Dissolved Chlorine, TD5, Sulphate, COD, BOD, DO, Nitrite Content and Fe Content.

pH, carbon dioxide, glucose, phosphate, alcohol and sucrose content of different brands of cold drinks available commercially will be conducted via instrumental and non-instrumental methods.

Evaluation will be done on the basis of written project report.

Registrations open to FY, SY, and TYBSc students
Maximum Intake: 10

Activity will be conducted between September 2016 and April 2017.

No of credits: 2 (30hrs or more)



ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF CHEMISTRY Honours Activity Research Project 2016-2017

Estimation of Copper Extracted from an Ayurvedic Drug
Tamra Bhasm by Various Analytical Techniques

Prof. Marazban Kotwal and Dr. Ashutosh Mishra

- You will learn selection of the appropriate analytical technique for analysis of a sample.
- Copper forms the major constituent of "Tamra bhasma", an ayurvedic formulation. It will be analysed using Atomic Absorption Spectrophotometer (AAS), Electroanalytical technique (DPP), Volumetric titration - Cu (II) EDTA titration and Eletrogravimetry. The project will cover use of analytical tool ANOVA and importance of uncertainty and its effect on the end result.
- Evaluation will be done on the basis of written project report.

No of credits: 2 (30hrs or more)

Registrations open.

Open to FY, SY, TYBSc Maximum Intake: 06 students

Project work will be carried out after end semester examinations (October 2016)

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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

Honors' course for 2016-17 offered by Caius Research Laboratory Research Methodology And Analytical Techniques

Course comprises designing experiments and learning techniques in Research Methodology

No of credits: 2

Eligibility: Science students of any discipline - FY, SY and TY

No. of Students: 15; Course Fees: Rs -1500/-

Evaluation: Continuous and submission of report

Duration:3rd to 9th October 2016, Attendance compulsory on every day.

Faculty Incharge: Dr. Priya Sundarrajan (email:priya.s@xaviers.edu)

Faculty conducting: Dr. Priya Sundarrajan and Dr. Vishwas Sarangdhar



St. Xavier's College (Autonomous), Mumbai
Department of Life Science and Biochemistry
HONOURS COURSE (2016-2017)



Neurogenesis and Differentiation in Chick Retina

The aim of the study is to understand Estradiol-mediated neurogenesis in the developing chick embryo system. The students will be assessed on experiment design, lab work, paper presentation and written report.

Class: SY BSc.

No. of Students: 06

Credits: 2

Duration: Throughout the year. (Minimum 30 hours of work)

Evaluation: Continuous evaluation and Presentation

Course conducted by:

Dr. Radhika Tendulkar

Course Fees Rs -2000/-

Last Date Registration: 10th August 2016

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry



HONOURS COURSE (2016-2017)

Life in a Drop - II - Identification and Classification

Students will be exposed to research methodology through sample collection, handling and microscopic analysis of water samples from various sources. Students will have to consolidated their observations into a scientific report for evaluation.

Class: SY BSc.

No. of Students: 4

Credits: 2

Duration: Through out the year. (Minimum 30 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course conducted by:

Dr. Maya Murdeshwar

Course Fees Rs -2000/-

Last Date Registration: 10th August 2016 Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry HONOURS COURSE (2016-2017)



Fluorescent Studies of Oxidative Stress

This course involves planning and conducting experiments to study the effect of ROS produced because of alcohol induced stress in yeasts using fluorescence microscopy after staining with 2',7' -dichlorofluorescin diacetate(DCFDA). The results have to be consolidated into a scientific report based on which the student will be evaluated.

Class: SY BSc.

Course conducted by:

Dr. Binoj Kutty

No. of Students: 6

Credits: 2

Duration: Through out the year. (Minimum 30 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course Fees Rs -2000/-

Last Date Registration: 10th August 2016

Contact Department of Life Science and Biochemistry for more details

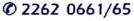


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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

HONOURS COURSE (2016-2017)



Nutritional Assessment of Students in St. Xavier's College, Mumbai.

Students will be able to design Survey questionnaire and collect data on the dietary habits of individuals and carry out a survey of the food items served in the college canteen, with a view to implement healthy changes. The results have to be consolidated into a report based on which the student will be evaluated.

Class: SY BSc.

No. of Students: 2

Credits: 2

Duration: Through out the year. (Minimum 30 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course conducted by:

Dr Maya Murdeshwar

Course Fees Rs -1000/-

Last Date Registration: 10th August 2016

Contact Department of Life Science and Biochemistry for more details



ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBAI DEPARTMENT OF MICROBIOLOGY Honours Activity on Animal tissue culture 2016-17

- Animal tissue culture is a major tool in basic research as well as in modern medicine. Some of the important areas in which cell culture plays a key role are cancer research, toxicity testing, virology, immunology, cytogenetics, stem cell biology, drug screening and gene therapy. The workshop is designed to provide a thorough understanding of this technique through theory sessions and laboratory exercises.
- · Course content The course will focus on practical aspects, such as design and layout of the cell culture laboratory, aseptic techniques, media preparation, methods for measuring viability, sub-culturing, cryopreservation, revival and cytotoxicity.
- This course will be conducted for six to eight days -six to seven hours per day. Students will be assessed on day to day performance and one written exam on practical aspects of the course at the end.

Registrations open till 15th March 2016. Contact Dept. of Microbiology



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St. Xavier's College (Autonomous), Mumbai Diploma in Forensic Science and Criminal Law 2016-2017 Department of Zoology

The course has been formulated with the aim, to provide an introduction and orientation to the functioning of the Indian Criminal Justice delivery system, and the role forensic science plays in this process. With the use of case studies, mock crime scenes and various practicals, it gives the students the opportunity to hone the basic skills necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security, Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science and the law.

- Admissions for the July 2016 to April 2017 batch are open.
- Eligibility Criteria Minimum HSC certificate or equivalent with a 60% grade (Pre-requisite: Arts (Psychology), Science or Law)
 - Selection Method: Merit based & Interview
 - Duration and Timings: One Academic year (July to April)
 - · Timings: 4:00 pm 7:00 pm Monday, Tuesday & Wednesday
 - Fees: Course Fees: Rs. 24,000 +200/-
- Faculty Members

Dr. Pushpa Sinkar, M.Sc., Ph.D (pushpa.sinkar@xaviers.edu)
Ms. Alethea Vaz, M.Sc. (alethea.vaz@xaviers.edu)
Ms. Riva Pocha, M.Sc. (riva.pocha@xaviers.edu)
Ms. Sejal Gupta, M.Sc. (sejal.gupta@xaviers.edu)



ST. XAVIER'S COLLEGE-AUTONOMOUS, MUMBA DEPARTMENT OF ZOOLOGY

HONOURS ACTIVITY -INTRODUCTION TO BIOINFORMATICS -2016-17 2 CREDITS

(Mr. Conrad Cabral)

- The importance of Bioinformatics in Biology today cannot be stressed enough.
- This course aims to introduce students to the field of Bioinformatics and develop key basic skills required like: Retrieval of data from the databases available, Alignment of sequences and the interpretation, drawing of phylogenetic trees and understanding molecular phylogeny and prediction of protein structures using software.
- At the end of the course, students are expected to do a project and give an exam. Both the project and the exam along with the student attendance will be considered for the final grade.
- Max. Intake 10 Students have to get their own laptops for the course
- Interdisciplinary FY, SY, TYBSc
- Every Wednesday 3.45-5 pm
- Registrations close on 31st July 2016

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2015 - 2016

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ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE L ARCHAEOLOGY

CERTIFICATE COURSE IN

STUDY OF EPIGRAPHIC AND NUMISMATICS OF INDIA

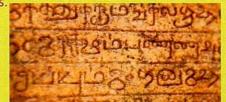
2015-16

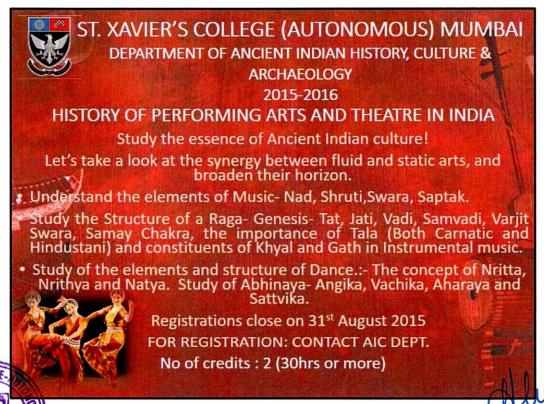
- Are you interested in learning about the scripts and coins of ancient India...
 - · Would you like to utilise current sources to reconstruct the past!

This course will deal with Literary, Archaeological, Numismatic and Epigraphic evidences for a holistic view of the facets of Indian culture.

- Introduction to Epigraphy Ancient Indian Scripts Introduction to Numismatics
- Coinage of Janapada (PMC & EUCC), Indo-Greek-Parthian- Scythian, Western Ksatrapas, Kushan, Satavahana, Tribal coins, Gupta, Pallavas, Chola and Cheras, Delhi Sultanate and Greater Mughal Coins.
- Registration closes on 30th Nov. 2015
- · Course commences in January 2016.
- · No of credits: 2 (minimum 30hrs)

For Details contact AIC Department.





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ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

Maritime Heritage of Ancient India

No of credits: 2 (30hrs or more)

- This course will help to understand the maritime tradition which a existed in India from the proto-historic period.
- Maritime Trade in early India.
- Ports and Ship yards and types of ship on the western and the eastern coast of India. (Marine archaeology)
- River Economy
- Trading centers and merchant guilds.
- Trade and river system in Northern, Central, Deccan and South India.
- Trade In Early Medieval Period
- Trade with South and South East Asia. East Asian Trade and Early European Trade

Registrations close on 15th December 2015 COURSE DURATION 45 hours

FOR REGISTRATION: CONTACT AIC DEPT.

2015-2016

ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI DEPARTMENT OF PSYCHOLOGY

Honours Activity No of credits: 2 (30hrs or more)

Research Paper Writing and Presentation at Khandala Seminar on Memory And Learning 2015-16

- The Psychology department of St. Xavier's College, Mumbai has been organizing an annual seminar for their undergraduate students for over 25 years. This co-curricular activity is open to FY, SY and TY students of the department and is held over 2 days (in a venue away from college). Individual students choose to present papers in keeping with a broad theme (that is selected after brainstorming with students). Some of the themes explored include Controversies in Psychology, An interdisciplinary approach to Psychology, Personality theorists, Human sexuality, Application of psychology to current events and phenomena.
- A broad theme is agreed upon after brainstorming with students. Each student chooses a specific topic (within that theme) to write their seminar paper on.
- They receive a two hour initial training on how to decide on specific topic for their seminar
 paper. They are taught basic research and reference skills. Then students need to work on
 their own time (involving more than 15 hours of work, usually during the diwali vacation)
 to create a literature review and outline for their paper.
- They will consult with the teaching staff (they have chosen as their guides) to organize and
 refine their written paper to be submitted. Final year students who have had experience
 with this activity are also available to mentor the students doing this for the first time.
- Enrolled students also receive one hour training on effective presentation skills before the eminar.

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Dept. of Inter-Religious Studies presents

An HONOURS COURSE

SELF DISCOVERY

Unlock your innate wisdom,
destress and
find the secret of peace and joy.
5th- 10th July 2015 from
2.30-6.30 pm at XIMR

-Creative Meditation, Journaling, Presentation
-Approaches of Spiritual/ Scientific/ Tribal
Traditions

Last Date to Register: 26th June 2015

Contact <u>dirs.xaviers@gmail.com</u> or

DIRS office from 9.30 am to 1.30 pm

AWAKEN TO COSMIC COMPASSION

Co-Facilitators: Dr. Orla Hazra and Prashant Olalekar SJ

14 Sept. 3 to 7 pm INTRODUCTORY SESSION

14 Sept. 3 to 7 pm - EXPOSURE VISIT: LISTEN to the Cry of the Earth

15 Sept. 3 to 7 pm- SESSION

16 Sept 3 pm to 18 Sept 7 pm: Weekend Workshop at Koshimbi.

3 Oct 3-5 pm: Presentation of Creative Assignment

At a time when the accelerating pace of Climate Change is threatening to wipe out even the human race it is imperative that we work out alternatives to the present consumerist lifestyle and capitalist development schemes.

How do we address the social and environmental issues we see around us?

How do we listen and respond to the cry of Earth: human and non-human?

Come join us so we can find personal and collective answers and be change agents for Earth's collective healing.

We guarantee, you will never experience reality in the same way again after this course!

For Details contact DIRS office or <dirs.xaviers@gmail.com>



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ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI

DEPARTMENT OF Mass Media

Honours Activity (two credits) 2015-2016

St. Xavier's College and PUKAR collectively Organises a Course in

Research as a tool for Perspective Building, Knowledge Production,

Community Engagement & Advocacy

- Pukar is an independent research collective and urban knowledge production centre which promotes research as a right for everyone.
- This course aims to empower second year students of Bachelor of Mass Media with the knowledge and skills of Community Based Participatory Action Research.
- To become change-makers in their communities so as to help create inclusive and sustainable cities.
- This course would be year long. Pukar will be conducting workshops throughout the year in the form of Orientation, Community Based Action Research, Ethics in social science research etc.
- Interested Students of BMM can register

Registrations open till 15th July 2015. Contact Prof Akshara Jadhav (BMM department) Course commences from 6th Aug 2015



ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project 2015-16

Bio-synthesis of Silver Nanoparticles and Study of their Size Selectivity and Stability with Different Capping Agents.

Prof.- in- Charge: Prof. Marazban Kotwal

Use of environmentally benign techniques for bio-synthesis of silver nanoparticles and comparison of reaction conditions and capping agents on particle size and stability using different instrumentation techniques.

No of credits: 2 (30hrs or more)

Registrations Open

LAST DATE FOR REGISTRATION: 31st July 2015

Venue: Physical Chemistry Lab

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ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF CHEMISTRY

Honours Activity Research Project 2015-2016

Development and Validation of an Antimicrobial Agent/S from a

Combined Pharmaceutical Drug Formulation using

Spectrophotometry
Prof.- in- Charge: Dr. Pralhad Rege

The aim of this project is to develop novel methods for combined pharmaceutical drug formulation having antimicrobial activity.

As part of the project you will learn-

- UV-VIS SPECTROPHOTOMETRY
- · Analytical method validation using ICH guidelines
- · Statistical calculations
- Quantification using Simultaneous Equation and Absorbance Ratio Method.

No of credits: 2 (30hrs or more)

Project commences: September 2015 Last date for Registration: 31st July 2015





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St. Xavier's College (Autonomous), Mumbai Department of Life Science and Biochemistry

HONOURS COURSE (2015-2016)



Open-ended experimentation

The aim of this course was to trigger lateral thinking in students early in their academic career, before they are bogged down with "correct" protocols and so-called "right" way of doing experiments in the lab. The students will have to plan their experiment, present their results to their peers and instructors.

Class: FY BSc.

No. of Students: 20

Credits: 2

Duration: Six Days in October after End semester examination.

(Attendance compulsory on every day)

Evaluation: Continuous evaluation and Presentation

Course conducted by:

Dr. Radiya Pacha-Gupta &

Dr. Priya Sundarrajan

Course Fees Rs -1500/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai
Department of Life Science and Biochemistry
HONOURS COURSE (2015-2016)



Screening of natural sources for inhibition of biofilm formation

This course involves designing and conducting experiments to study biofilm formation by a soil isolate, the factors affecting the biofilm formation and screen for inhibitors of biofilm formation. The results have to be consolidated into a scientific report based on which the student will be evaluated.

Class: SY BSc.

No. of Students: 4

Credits: 3

Duration: Through out the year. (At least 45 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course conducted by:

Ms. SangeetaS., Dr PriyaS.

and Dr. Binoj K.

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai
Department of Life Science and Biochemistry
HONOURS COURSE (2015-2016)



Use of fluorescence microscopy to study 'Reactive Oxygen Species (ROS)' stress in ethanol producing yeast.

This course involves planning and conducting experiments to study the effect of ROS produced because of alcohol induced stress in yeasts using fluorescence microscopy after staining with 2',7'—dichlorofluorescin diacetate(DCFDA). The results have to be consolidated into a scientific report based on which the student will be evaluated.

Class: SY BSc.

Course conducted by:

No. of Students: 4

Dr Priya S., Ms. Sangeeta S.

Credits: 3

and Dr. Binoj K.

Duration: Through out the year. (At least 45 hours of work)

Course Fees

Evaluation: Continuous evaluation and Report writing.

Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



St. Xavier's College (Autonomous), Mumbai
Department of Life Science and Biochemistry
HONOURS COURSE (2015-2016)



A study of: a. Reproductive fitness and b. Hypoxic induction of mega

hemoglobin in Daphnia

The aim of this course is to design and perform experiments to study hypoxia and reproductive fitness in *Daphnia* when cultured in presence different protein sources. The students will have to submit a report at the end of the course based on which they will be evaluated.

Class: SY BSc.

Course conducted by:

No. of Students: 4

Dr Seema Das

Credits: 3

.

Duration: Through out the year. (At least 45 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



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St. Xavier's College (Autonomous), Mumbai

Department of Life Science and Biochemistry

HONOURS COURSE (2015-2016)



A study of the effects of stress on Chironomus larvae.

This course will involve designing and performing experiments to study the effect of tobacco leaf extract on *Chironomous* larvae in the presence and absence of green tea extract. The students will have to submit a report at the end of the course based on which they will be evaluated.

Class: SY BSc.

No. of Students: 5

Credits: 3

Duration: Through out the year. (At least 45 hours of work)

Evaluation: Continuous evaluation and Report writing.

Course conducted by:

Dr Nandita Mangalore and

Dr Manasi Kanuga

Course Fees Rs -2000/-

Contact Department of Life Science and Biochemistry for more details



ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF MICROBIOLOGY

Honours Activity on Animal tissue culture 2015-2016

- Animal tissue culture is a major tool in basic research as well as in modern medicine. Some of the important areas in which cell culture plays a key role are cancer research, toxicity testing, virology, immunology, cytogenetics, stem cell biology, drug screening and gene therapy. The workshop is designed to provide a thorough understanding of this technique through theory sessions and laboratory exercises.
- Course content The course will focus on practical aspects, such as design and layout of the cell culture laboratory, aseptic techniques, media preparation, methods for measuring viability, sub-culturing, cryopreservation, revival and cytotoxicity.
- This course will be conducted for six to eight days -six to seven hours per day.
 Students will be assessed on day to day performance and one written exam on practical aspects of the course at the end.

Registrations open till 15th March 2016. Contact Dept. of Microbiology

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St. Xavier's College (Autonomous), Mumbai Diploma in Forensic Science and Criminal Law 2015-2016 Department of Zoology

- The course has been formulated with the aim, to provide an introduction and orientation to the functioning of the
 Indian Criminal Justice delivery system, and the role forensic science plays in this process. With the use of case
 studies, mock crime scenes and various practicals, it gives the students the opportunity to hone the basic skills
 necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security,
 Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science
 and the law.
 - · Admissions for the July 2015 to April 2016 batch are open.
 - Eligibility Criteria Minimum HSC certificate or equivalent with a 60% grade (Pre-requisite: Arts (Psychology), Science or Law)
 - · Selection Method: Merit based & Interview
 - · Duration and Timings: One Academic year (July to April)
 - · Timings: 4:00 pm 7:00 pm Monday, Tuesday & Wednesday
 - Fees: Course Fees: Rs. 24,000 + 200/-
- Faculty Members

Dr. Pushpa Sinkar, M.Sc., Ph.D (pushpa.sinkar@xaviers.edu) Ms. Riva Pocha, M.Sc. (riva.pocha@xaviers.edu) Ms. Sejal Gupta, M.Sc. (sejal.gupta@xaviers.edu)



ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF ZOOLOGY

Honours Activity 2015-2016

Basic Astrobiology' (2 Credit)

- A 2-credit interdisciplinary lecture course along with a field visit will be conducted on 'Basic Astrobiology' by Dr. Sujata Deshpande.
- Open to FY, SY, and TY students of BA, BSc, BSc- IT, BMM and BMS.
- The following topics will be covered in the course: Origin of Earth, Origin of life on Earth, Evolution of life, Habitable zones in the solar system and Universe, Detection of exoplanets.
- Assessment on the basis of attendance, tests and the field visit report. (Max. enrolment 30 students)

Registration at Zoology Lab.

Last date for Registration: 31st July 2015



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ST. XAVIER'S COLLEGE (AUTONOMOUS)

MUMBAI

DEPARTMENT OF ZOOLOGY

Honours Activity 2015-2016

"DNA Damage and Repair"

- An interdisciplinary lecture course on Molecular Biology titled, "DNA: Damage and Repair" will be conducted by Mr. Conrad Cabral.
- The course will be offered for 2 credits and the students will be graded on the basis of their attendance and performance in the test.
- Open to a maximum of 10 senior college Biological Science students.
- · Registrations open till 31st July 2015.(Zoology Dept.)
- · No of credits: 2 (30hrs or more)



ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI DEPARTMENT OF ZOOLOGY

Honours Activity 2015-2016

ORNITHOLOGY AND HERPETOLOGY TWO CREDITS (Dr. Leon Pereira)

A lecture course cum field visit will be conducted on "Ornithology and Herpetology". Students will learn about the Taxonomy, Classification and Biology of Reptiles (Snakes) and Birds through lectures and field trips. The students will be graded on the basis of a field report and overall performance and participation during the course.

SY and TYBSc Zoology students and students working for the Zoology Honours Program can apply for this course.

Field trip will be charged separately

Every Thursday: - 3.30-5.00 pm

Registrations open till 15th July 2015.

Commencing from third week of July.

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