

(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI

# REPORT ON FEASIBILITY OF REVAMPING THE CROSS FACULTY COURSE FROM 2017-18

#### INTRODUCTION

The Principal constituted the following interdisciplinary committee in November 2016, to look into the possibility of revamping the Cross Faculty Course -

Science (including BSc-IT and BVoc-SD):

Convenor: Binoj Kutty

Members: Rohan Jadhav, Maya Murdeshwar, Saima Khan

Arts (including BMM, BMS, BVoc-T):

Convenor: Ruby Pavri

Members: Rashmi Lee George, Radhika Rani, Rahul Menon, Kaizeen Jehangir

## These two sub-committees:

- engaged with each other through brainstorming meetings.
- (held on 19th Nov. and 3rd Dec. 2016, and 16th Jan. 2017).
- connected with students (to ascertain their expectations and feedback on CFC).
- obtained feedback from faculty members, especially those teaching CFC courses.
- referred to syllabi of other institutes that conduct such courses.
- collaborated to compile the report.

## **OBJECTIVES**

We were asked to deliberate on the following issues and were given freedom to 'think radically':

- Nomenclature per CFC created; the content of each CFC; the number of modules per CFC; the number of credits to be offered per CFC.
- 2. Teaching modalities with respect to the department responsible for coordinating each CFC; which lecturers would teach the course; should the teaching be shared across faculty members from the sub-discipline?
- 3. Evaluation modalities for the CIA's and the ESE.
- Impact of introduction of such a course on the practical workload of the teaching and non-teaching staff.
- Impact on overall workload of the faculty.

**EVALUATION OF THE CURRENT SYSTEM** 

The model of the second of the

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

## Current course

- The current CFC runs as 3 lectures a week held at the same time slot for all departments of Arts and similarly for Science
- The list of current courses and brief descriptions are given in Annexure A (p.7)
- There are 10 courses offered by the Arts departments and 9 offered by the Science departments.
- In many of the Science departments the 3 CFC lectures are over and above the required workload.

## Strengths

- Feeling of excitement and novelty amongst the students.
- Different and challenging experience with diverse students.
- Innovative courses with flexibility in design and evaluation for the instructor.
- Exposure to courses from multiple disciplines adds weight to a student's résumé (especially if applying abroad).

## Limitations

- From Students' Perspectives
  - Misconceptions regarding what the course will cover and evaluation modalities.
  - Many do not get their preferred choice of department.
  - Lack of clarity regarding how CFCs are allocated.
  - Too theoretical, not enough done through practicals / field visits.
  - Teaching-Learning: Some courses taught at a higher level of understanding, without providing sufficient background (especially with respect to Science courses for Arts students - students find it difficult to cope with this).
  - Evaluation: Arts students tend to score higher as Question/Answers for CFC conducted by science departments are more objective. In contrast Science students tend to write to-the-point answers and score lesser, as they are not used to writing long essay-type answers as required for the questions in the CFC conducted by Arts department.

From Teachers' Perspectives

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001. 2





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

#### Report #1

17th Jan. 2017

- Extra workload for many departments (has to be shared by some, which has its own set of administrative problems and contributes to a lack of cohesiveness).
- One semester is too short to establish rapport with students.
- Especially difficult to reach out to students who are apathetic because they didn't get their choice or they do not perceive this as relevant to their cumulative learning curve.
- Shortage of time and logistical problems with setting up of practicals / organizing a field visit.
- Coverage of basic concepts in a subject needs to be tackled before getting to the relevant content of the specific CFC (level of teaching for the target group is difficult to ascertain especially with a diverse class).
- Course content ends up being diluted to match the level of students with no previous background in the subject.
- Science students particularly find reference work difficult due to time constraints.
- Level of motivation in some teachers is lower for CFC (where it is an extra workload) because of the demands of the Career Advancement Scheme activities (eg. API points, Category III -Research), which are perceived as more important for promotions.
- Teachers are engaged in their respective break time and end up missing staff events held in the department during those time.

#### POSSIBILITIES FOR A SINGLE CFC

- LOGISTICS (who teaches, modalities for learning and evaluation etc.)
  - The course will have to be modular (with a compulsory module on Financial Management) with a single teacher completing the teaching and evaluation (with flexibility of evaluation formats) for a particular module to maintain uniformity.
  - Modular Approach (3 Modules)
    - 1 compulsory module (Financial Management) to be completed in the first 3 weeks and evaluated through CIA-1 (9 lectures, Weightage: 20M).
    - Students can choose any 2 from the other modules on offer one in January and one in February (Each to be completed within 15 lectures, with flexible evaluation formats, each worth 40M).

 A specific module to be offered by the department in January and repeated in February for another batch (not necessarily by the

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

## Revamping CFC

#### Report # 1

17th Jan. 2017

- Extra workload for many departments (has to be shared by some. which has its own set of administrative problems and contributes to a lack of cohesiveness).
- One semester is too short to establish rapport with students.
- Especially difficult to reach out to students who are apathetic because they didn't get their choice or they do not perceive this as relevant to their cumulative learning curve.
- Shortage of time and logistical problems with setting up of practicals / organizing a field visit.
- Coverage of basic concepts in a subject needs to be tackled before getting to the relevant content of the specific CFC (level of teaching for the target group is difficult to ascertain especially with a diverse
- Course content ends up being diluted to match the level of students with no previous background in the subject.
- Science students particularly find reference work difficult due to time constraints.
- Level of motivation in some teachers is lower for CFC (where it is an extra workload) because of the demands of the Career Advancement Scheme activities (eg. API points, Category III -Research), which are perceived as more important for promotions.
- Teachers are engaged in their respective break time and end up missing staff events held in the department during those time.

#### POSSIBILITIES FOR A SINGLE CFC

- LOGISTICS (who teaches, modalities for learning and evaluation etc.)
  - o The course will have to be modular (with a compulsory module on Financial Management) with a single teacher completing the teaching and evaluation (with flexibility of evaluation formats) for a particular module to maintain uniformity.
  - Modular Approach (3 Modules)
    - 1 compulsory module (Financial Management) to be completed in the first 3 weeks and evaluated through CIA-1 (9 lectures, Weightage: 20M).
    - Students can choose any 2 from the other modules on offer one in January and one in February (Each to be completed within 15 lectures, with flexible evaluation formats, each worth 40M).
    - A specific module to be offered by the department in January and repeated in February for another batch (not necessarily by the



PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

same teacher - extra workload can thus be shared). This will facilitate smaller batch size per class, while reaching out to more students.

- Lectures could be held in a single session (3 lecture periods) or in a (2+1) lecture format during the week.
- Individual modules can be evaluated and scores assigned at the end of each module during the course. (Class participation, Assignment OR Field trip and Reports) worth 40M for each module.
- No CIA or separate ESE required.
- Non-Modular Approach (Current approach)
  - Unit-1 on Financial Management to be handled by experts from BMS / Accounts / Economics.
    - CIA-1 is entirely FM
  - Unit-2 and -3 within a specified subject, with course content adapted to fit the reduced time slots.
    - · CIA-2 if conducted, to be held from either of these two units.
  - ESE has all three units OR covers only Units-2 and -3 which are within a specified subject.
  - Can continue with the current format of 3 spaced lectures per week.
- COURSE CONTENT (for the proposed CFC)
  - CFC conducted by ARTS departments for the SYBSc, BSc-IT and BVoc-SD students
    - The Philosophy behind Liberal Arts.
    - The Evolution of Social Sciences
    - Media Literacy (multidisciplinary).
    - Entrepreneurship (by the Department of Management Studies).
    - Pick a major focal / world event / theme (eg. 'Conflict') and critically analyze it from various perspectives through the modules offered (Sociology, Economics, History, Literature, Politics, Psychology)
    - Modules offered could also be unconventional, covering an aspect of Fine Arts or Performing Arts (music, drama), Sports or Interreligious Studies.
  - CFC conducted by SCIENCE departments for the SYBA, BMM, BMS, BVoc-T students





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

## Revamping CFC

#### Report # 1

17th Jan. 2017

- Innovations in Science (highlighting the progress of science through the century covering major breakthroughs in Physical and Biological Sciences).
- Evolution of Scientific Thought (look forward from past to present, or, look progressively backward to trace the roots of an idea).
- IMPACT of such a change (on workload, students)
  - More choice for students with the modular approach.
  - Students get different perspectives on a common theme.
     This will facilitate critical thinking and rational analysis.
  - Workload can be protected / shared.
  - However, readymade texts / content might not be easily accessible.
  - If there is a single comprehensive course, teachers will need to be trained (or outsourced) with respect to maintaining uniformity in teaching and evaluation.

## OUR INSIGHTS (from the feedback)

- An overwhelming majority of students do not want a single CFC to replace subject-related department-specific CFCs.
- Many are excited about exposure to a different kind of perspective.
- · Do not force students to take courses they are not interested in.
- Teachers' and students' outlook towards the course needs to be improved.

(The impression is that a larger population just wants to get done with it. In which case there is no major benefit or learning from the experience for either the teacher or learner).

#### RECOMMENDATIONS

- Continue with department-specific courses <u>but change the marginalized</u> treatment given to them by the departments.
- The course descriptions on the website need to be made more concise and content-specific (CFC Syllabus is not available on our website)
- SYs would benefit from an orientation regarding the CFC choices available to them.
- Transparency to be maintained in the process of allotment of CFC choices to the students. (The selection process criteria and details should be made available on the College website).
- The three lectures could be scheduled as a double and single during the week.
   This allows for conducting a short practical, workshop or structured exercise or screening a film / documentary with time for discussion.

Have just one CIA but keep the modality flexible for departments.

PRICIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

- Each department needs to rethink / review the kind of course and modules being offered. Must be perceived as relevant by the student group.
- Survey / Questionnaire to be generated and circulated among students who have completed the CFC course (for systematic feedback).



PRINCIPAL
ST. XAVIER'S COLLEGE
(AUTONOMOUS)
MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report #1

17th Jan. 2017

## Annexure A

Description of the Cross Faculty Courses currently offered at St. Xavier's College, (Autonomous), Mumbai.

- Offered by the ARTS departments for Science students including BSc-IT and BVoc-SD
- 1. Indian Culture The Philosophy Within [Department of Ancient Indian Culture] Indian Culture, the Philosophy within, is a study of the essence of the multifaceted culture of our subcontinent in the Political, Social, Economic, Religious and Philosophical parameters. Through interactive discussions, Field Trips, Films, Documentaries, Workshops and Guest lectures the topics will be explored to give a broad understanding of the innate aspects of Indian culture where the holistic elements of Indian Philosophy form the natural weave. The attempt of the course is to provide a judicious and a logical understanding of Indian Culture which in all aspects presents a vibrant, dynamic and a diverse whole.

#### 2. International Economics

[Department of Economics]

The objective of the course is to provide a basic background against which students (especially those with no knowledge of the Theory of Economic) can analyze current International economic problems. To achieve this, students will be exposed to various aspects of International trade, Trade embargoes, Trade theories, Trade policy and the International Monetary system.

## 3. Literature and Resistance

[Department of English]

The course explores how texts from different cultures and traditions may reflect or influence values, assumptions and the sense of identity. It aims to help students become critical readers of fiction, poetry and drama by introducing them to literary concepts and themes of conflict and resistance. The readings include texts on social and political resistance and an introduction to feminism, as an example of resistance to patriarchal values, and also draw attention to the use of poetry with its imagery, symbolism and figures of speech, as a medium of resistance.

#### 4. An Introduction to Gandhian Studies

[Department of History]

This course is a study of, the Father of our nation, Mahatma Gandhi, the leader, nation builder and an exceptional personality. It deals with colonial India and the life and times of Mahatma Gandhi, his struggles for personal freedom and for a free India. It will focus on his methods of fighting back the imperialists in India and in South Africa. It will cover his basic and simple philosophy of life, struggle against the mighty British and about self control. It is about how he





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Revamping CFC

Report #1

17th Jan. 2017

moblised the nation towards one common objective and goal ie. freedom. The course will highlight the various practices of Truth, Non violence, Satyagrha etc. It will try to draw parallels to the methods used across the world to seek justice and promote peace. The course will expect students to go through Gandhi's autobiography and understand his stages of evolution in personal and as well in his political career. The students will be given research articles on various themes related to his philosophy and movements. It will try to understand the opposition he had from his contemporaries and other sections of society. It is equally important to study his dream for India and how he wanted the country to progress. His concepts of state, nation, village industries etc are still so relevant to study and debate upon. The generation today needs to know about him, not merely as a name and symbol, but also what he achieved as a leader. If today we forget Gandhi and his principles, then we will have to revive him again, because he is timeless and has left an indelible mark on the history of our country and around the world. Apparently Einstein once wrote the following about Gandhi: "Generations to come, it may be, will scarce believe that such a one as this ever in flesh and blood walked upon this earth"

#### 5. Fundamentals of the Indian Constitution

[Department of Political Science]

The course helps in understanding the basics of the Indian Constitution and the working of the governmental machinery with focus on the selection, qualification, powers and limitations of the President and the election, appointment, powers and role of the Prime minister. It also provides an overview of The Judiciary, with special attention to the organization, that is, the High court and Supreme Court and finally judicial activism.

#### 6. Science of Culture

#### [Department of Sociology & Anthropology]

The course will explore the concept of culture. Culture is not easily defined, nor is there a consensus among scholars, philosophers and politicians (nor, probably, among the rest of us) as to what exactly the concept should include. We hope here to expose students to its various usages and different meaning. For this we will look at the history of the culture concept by exposing students to a few of the wide ranging debates which have gone on about the concept of culture during the past century and see its relevance to practitioners of science. Furthermore, we hope to offer some insight into what the culture debate means in our own lives and to provide some examples of how cultural meanings are formed, maintained, and changed. Some of the topics covered will be Popular culture and Information society.





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

7. Science, Technology and Social Change: Some Issues and Challenges

[Department of Sociology & Anthropology]

Science students do get an opportunity to develop expertise in their chosen discipline. Often times, however, this expertise is not in sync with social realities. This single Semester special course has been designed to provide the undergraduate science student from any subject specialization the ability to interrogate broader social questions as they impact the world of science. It is hoped thereby that their study and subsequent practice will be better informed and be motivated through social concerns.

8. Representing the Nation through the News Media

[BMM Department]

This paper aims to give students an overview of the news media. It is an introduction to regional newspapers, their crusade to educate Indians on the real issues and the Indian regional language newspaper's role in nation building. In this age of 'breaking news' there is an attempt to deconstruct news and reach the readers: this will be reflected on.

9. Management Accounting and Investment Portfolio Management [BMS Department] It is difficult to earn money but it is more difficult to multiple it. To understand various opportunities of investments in the market it is necessary to learn to understand the balance sheet and profit and loss accounts. The subject Management Account and Investment Portfolio is framed in such a manner that science students can study various investment opportunities which are existing in the market and by their own analytical skill they can also do investments after they start earning.

#### 10. The Psychology of Relationships

[Department of Psychology]

All humans engage in various interpersonal relationships but may not be aware of the psychological factors that play a role in adjustment and growth through these relationships. This course involves the application of psychology with the aim of helping people to be more effective in their interpersonal interaction. It will give the insight into overcoming barriers in communication, understanding friendship, love, vulnerable areas in marriage & sexual relationships. Modules include:An orientation to Psychology (as a science) and it's applications Topic 1: Interpersonal communication and conflict Topic 2: Friendship and Love Topic 3: Marriage and intimate relationships



9



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

 Offered by the SCIENCE departments for Arts students including BMM, BMS and BVoc-T

## 1. Descriptive Statistics

[Department of Statistics]

Today the need of Statistics is felt in almost every sphere of human activity. Statistics is not just the mere collection of data and its presentation through graphs, diagrams and tables. It is a body of techniques for making inferences from observed data. In fact Statistics is considered a science which uses observed data to make decisions in the face of uncertainty. This covers considerable ground since uncertainties are met in every situation and walk of life. We experience uncertainties in everyday life, like when a teacher compares the abilities of students, when an economist forecasts trends, when a newspaper predicts an election and so forth. This course aims at acquainting students with basic statistical techniques and their application to different practical problems. Students will acquire knowledge of tabular and diagrammatic representation of the data, averages, measures of dispersion, coefficients of skewness and kurtosis, simple linear correlation and coefficients of association. Ultimately our aim is to provide a basic framework to equip students to look at situations in a logical and analytical fashion.

#### 2. The Art of Mathematics

#### [Department of Mathematics]

The students will be involved in learning concepts through simple illustrations that are both challenging and stimulating. The idea is to inculcate mathematical ways of thinking and at the same time cover topics that will be generally useful to liberal arts students. The emphasis is on making on the course interesting and yet delivering the matter required without dilution. This course is a mixture of undergrad level topics with a fun-flavour added and the art of problem formulation and solving. In general, no formulae will need to be memorised, they will all be available wherever required. Calculators will be allowed. There will be 36 lectures of 50 minutes each. Attendance requirement will be as per college guidelines. The basic areas covered are

- Art of Problem Solving
- · The Art of Counting
- Equations and Graphs
- Introduction to Calculus, formulating problems and methods used for solving problems
- Basics of Linear Algebra
- · Mathematics in Everyday Life

#### 3. Garden Art

## [Department of Botany]

The course aims at introducing students to the joys of gardening, while simultaneously combining an introduction to the scientific aspects of plant propagation, soil quality and soil maintenance with the more commercial applications of horticulture. The latter include landscaping, flower arrangement, and creating Bonsai. The program involves compulsory visits to gardens in the city.

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

 Chemistry in Context: Applying Chemistry to Society Chemistry [Department of

Chemistry is a practical art. Everything we see, smell, touch or taste is chemistry. Chemistry is all around us improving our quality of life. In our everyday life we come across various materials which are all contributions of Chemistry whether it is food, clothes, drugs, cosmetics. All medicines, modern drugs or traditional herbal remedies, rely on chemistry. Creative chemistry also provides energy and transport and is continually looking to do all these things whilst conserving scarce resources and protecting our natural environment. A common knowledge of the fundamental chemistry behind the products we use will enable us to choose what is essential and discard what is harmful to our life, for example whether the cosmetics that we use really offer what they claim, whether there is a difference in the cleansing property of the very costly and moderately priced toilet soaps, what type of unwanted, non nutritive chemicals are present in packed food items and soft drinks available in the market? This course 'Chemistry in Context' will show you how chemistry is present in all aspects of our life - helping to feed us, clothe us, house us, entertain us and keep us healthy. The course includes topics such as nuclear energy and energy alternatives; health, food and nutrition, kitchen chemistry, plastics, chemicals in the environment, medicine, etc. The goal of the course is to establish a relationship of chemical principles with significance to social, political, economic, and ethical issues. Color is used extensively to express the artist's message. "Chemistry in Art" provides a variety of perspectives on chemistry. The chemical materials used will be presented with a historical perspective of their usage in art, and how this usage affected the techniques of various artists. In this course, we will survey some of the interactions of chemistry in order to create an aesthetically pleasing form of art.

#### 5. Nutrition & Reproductive Health

[Department of Life Science & Biochemistry]

The course introduces students to two essential aspects of health – Nutrition and Reproductive health in two modules. The first module will examine food and its relation to health, food groups and their selection, the body and energy expenditure, nutritional disorders and food laws, policies, safety etc. The second module deals with human reproduction, infertility, contraception, birth defects and other reproductive disorders.

## 6. Infectious Diseases: Staying Ahead

[Department of Microbiology]

Infectious diseases are the leading cause of death in the world. They have been around since the beginning of time, shaping world history and threatening mankind. Medical breakthroughs like antibiotics and vaccines have assisted in combating infectious diseases. Thirty years ago when small pox was eradicated from the face of the earth scientists were optimistic and believed the long struggle for control of infectious diseases was almost over. While there have been successes there have also been defeats. Newly recognized diseases caused by viruses,

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

bacteria and other infections are continually emerging and posing daunting global challenges for patient diagnosis, treatment and for public health responses. Even as new pathogens are emerging so are new technologies that may lead to effective new prevention and treatment strategies. This course is hoping to promote awareness of infectious diseases and related research and development of new vaccines and drug treatments.

7. Physics behind Astronomy, Photography and Technology [Department of Physics] Every day changes in the sky puzzles the common man and he wonders about the stars and galaxies around us. Knowing that we are part of one galaxy in the same universe one wants to find the origin of this universe. Physics helps us reveal and understand the mystery of things being observed in the universe. The Astronomy unit of this course being offered by the department of Physics will give one an idea of the origin and evolution of the stars. It will help solve many riddles about the universe. We all handle cameras and do photography. It is a general notion that if we have a good camera we will get good quality photographs. In the unit on Photography in this course, you will learn the physics behind every part camera and the process of photography. This it will definitely help you use the same camera more effectively and improve the results of your photography. This is the era of technology. The technology is spreading very fast, with new innovations, and occupying space in every part of our life. In the last unit of this course we will show you demonstrations based on simple concepts of physics which forms the basis of technology. You will enjoy trying some demonstrations on your own which will remove the fear of physics from your mind.

8. Web Designing [IT Department]

Today, website development is required everywhere. A website makes data accessible from anywhere in the internet. Learning web designing is certainly an advantage. This course of web designing is divided into three units namely • Html and CSS • Photoshop • ASP .NET. HTML and CSS are the fundamental technologies for building Web pages. CSS is for style and layout. This course teaches Dreamweaver software in depth, which is used for website designing. One can make webpage layout, animation easily without writing much code . Eg. Making the menu bar in dreamweaver is by dragging the menu control available. HTML is a markup language for describing web pages. Modifying images for the web is through photoshop. One can make animation in photoshop. Adobe Photoshop is the premier photo editing software tool available. ASP is a server side language , which is used to process the request . With ASP one can get data from database dynamically . ASP interaction with database will be taught. ASP is a Microsoft technology that enables you to create dynamic web sites This course also teaches about the security required in the website. After taking this course , one can design websites, add animation, put security in the website. This course also teaches you how to make your own





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA. © 2262 0661/65

Revamping CFC

Report # 1

17th Jan. 2017

server and put it in the local area network / internet. At the end of the course "designing a website" will be done as an assignment. Students will be guided on making the website.

9. Secret Lives of Animals

[Department of Zoology]

The course will begin with an introduction to evolutionary theories which form the basic framework of all fields of biology. The origin of life on earth and Darwin's insight into evolutionary history will be dealt with in the first unit, Evolution: a walk with nature. Some of the strategies that animals use to survive will be introduced in the next two units. Like human beings, many animals have evolved to form societies with different levels of work organization and communication among the members. The second unit of the course discusses social animals and evolution of their social organization. Animals show extraordinary abilities to survive extreme environmental stresses. They tolerate freezing, complete desiccation, extreme heat and exposure to chemicals that are fatal to most other organisms. The third unit of the course introduces and defines what conditions constitute 'extreme environments' and explores the strategies animals use to survive in these habitats

ARTS COMMITTEE

Ruby Pavri Convenor SCIENCE COMMITTEE

Binoj Kutty Convenor

Date: 17th Jan. 2017





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI

# REPORT ON STUDENT SURVEY RESPONSES (FEEDBACK) ON THE CROSS FACULTY COURSE

#### INTRODUCTION

The Principal constituted the following interdisciplinary committee in November 2016, to look into the possibility of revamping the Cross Faculty Course -

Science (including BSc-IT and BVoc-SD):

Convenor: Binoj Kutty

Members: Rohan Jadhav, Maya Murdeshwar, Saima Khan

Arts (including BMM, BMS, BVoc-T):

Convenor: Ruby Pavri

Members: Rashmi Lee George, Radhika Rani, Rahul Menon, Kaizeen Jehangir

## These two sub-committees:

- Submitted their 1st report on 17th Jan. 2017
- Met on 6th & 16th Jan., 13th Feb., 14th & 15th Mar, 2017.
- Constructed a survey to assess student feedback and suggestions regarding revamping the CFC.
- This was circulated (20th Jan. 2017) through the heads of departments / representatives from the CFC committee to reach out to the current TY students who then accessed the Google forms link to respond to the survey <a href="https://goo.gl/forms/ZHCBkLkcfGRDCE2A3">https://goo.gl/forms/ZHCBkLkcfGRDCE2A3</a>
  - The responsibility was allotted as follows:

Professor: (Departments to be sent to)

Binoj: (Geo, BMS, BMM)

Saima: (Chemistry)

Rohan: (Physics, Maths, Stats)

Maya: (Life Science, Microbiology, Botany, Zoology)

Rahul: (All Economics) Ruby: (Psychology, IT)

Radhika: (Soc/Anthro & BVoc.)

Kaizeen: (History & Political Science)

Rashmi: (English & AIC)

- ➤ Initial deadline for the survey was 30<sup>th</sup> Jan., but only 157 students had responded, so it was extended to 3<sup>rd</sup> Feb. 2017.
- 239 out of approximately 600 students responded.

The feedback forms have been duly collated and analysed to create the final report.

TOLEGE: AUTOMOTOR

NAAC SSR Cycle 4 (2015-2020) : 2016 – 2017 CFC Course Feedback Reports\_Students



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001,
INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

Refer to the Appendix for the tabulated data and statistics.

#### RESPONSES OBTAINED FROM STUDENTS

- Most of the responses recorded (around 70%) were from Arts students who had attended science CFCs.
- 77% of students were allotted their choice of CFCs.
- Over 60% of students felt that course objectives were clear at the start of the course, while 84% felt that the course objectives as stated in the syllabus were met.
- Around 60% have rated the quality of the teaching-learning experience as being effective. Only around 15% felt that the experience was not satisfactory.
- Over 50% felt that the subject offered in the CFC generated a lot of interest in them.
- 58% of students felt that the evaluation formats in the CIA were effective, while 60% felt that the ESE format was effective. Around 13% and 14% felt that the CIA and ESE evaluation formats were below average respectively.
- 49.4% of students responded that marks obtained in CFC increased their SGPA, while 21.8% felt it lowered their SGPA. 28.9% claimed it had no impact. (Please note that this may simply reflect the fact that more Arts students than Science students have responded to the survey).
- Around 70% of students felt that the CFC had contributed to their personal development in some measure. Around 80% felt that their intellectual development was aided by the CFC in some measure.
- Only 7% of respondents would support the move to a single CFC in Arts and Sciences. 57.3% believe that the structure should be retained with revisions. About 36% feel that it should be retained as it is.
- An overwhelming 90% of respondents have stated that a single common CFC would not be preferable.

#### SUGGESTIONS FROM STUDENTS REGARDING RE-STRUCTURING

- Students have indicated that changes should focus on the following areas:
  - Course Content (66.2%)
  - Instructor expertise (31.5%)
  - Teaching methodology (47.2%)
  - Evaluation format (27.8%)



PRINCIPAL ST. XAVIÉR'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

What follows is a summary of the qualitative suggestions given by respondents.

- Several students felt that the CFC should not be re-vamped into one common course because:
  - It inhibits the diversity and choice
  - It would make the learning experience superficial (content would become generalised)
  - It would increase the number of compulsory subjects having a standardised format
  - Interests and aptitudes of students are different
  - The current system increases interaction with students from different fields
  - Considered to be a stress-buster and breaks monotony from regular courses
  - Different courses give scope for intellectual creativity
  - "Our degree is very inflexible as it is. CFC in its current form gives students some degree of respite and freedom to choose what they study".
- Many students have requested for an orientation/preview of the courses conducted by the respective faculty (before CFC forms have to be submitted) so as to enable a more informed choice.
- A majority of students have mentioned the importance of being allotted their CFC choices and increasing the range of options to choose from
  - Seats for more popular courses should be increased
  - Students should be allowed to choose CFC courses from either streams as long as it is from a department which they are not part of (specifically relevant to the restriction of choices for BMM, BMS and BSc IT)
  - Choice based on the "merit system" could be reworked to accommodate everybody's interests
  - According to one respondent,
    - "Students with higher GPAs choose easier subjects and students with lower GPAs who need easier subjects, suffer as they are forced to take tougher subjects"
- Many respondents believe that the CFCs should be conducted over two semesters to make it more comprehensive, meaningful and less rushed.
- Students feel that they should be having access to relevant, application-based content rather than merely theoretical content. Arts students have expressed a desire for more lab visits, field studies etc.
- The content needs to focus on the level of students' comprehension, considering the background they come from (for eg: Arts students coming from a non-science background). Technical terms should be expressed in a more simplified manner, for those who have no background in that subject. Initial classes should focus on the basics and build up towards higher concepts more gradually.

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

## Revamping CFC

#### Report # 2

15th Mar. 2017

- In CFCs where modules are shared across professors, there needs to be better co-ordination regarding lecture allotment within the week so as to minimise confusion and ensure that topics do not overlap. (In some departments, the diverse perspectives from different teachers, kept students engaged).
- The following response underscores the importance of instructor expertise,
   ""
  - "...please provide the strongest teachers from the department, and not the freest teachers, to take the cross faculty classes as it reflects on the entire department and shapes opinions. Don't mean to derogate the teachers that do take the effort to take cross faculty, but whenever the course is handled by someone who truly revels in the subject is the interest in amateurs generated!"
- The teaching method should be interactive, interesting and creative rather than a
  passive delivery of content. Apart from lectures, experiments, lab-work, model
  projects and field visits (beyond-the-classroom activities) should be included.
- Some teachers need to have better class management.
- To make comprehensive, consolidated study material accessible earlier in the course than towards exams.
- Efforts could be made to create a CIA (Assignments, Presentations) that allows the students to link the CFC to their own core subjects, to stimulate inter-disciplinary thinking. For example, a Psychology student in a Chemistry CFC could study the chemical basis of depression.
- It was challenging for some Arts students to rote-learn and answer science questions as they perceived them as requiring a different approach.
- Evaluation without considering the background of the students from a different stream was considered to be strict.
- CIA guidelines for certain departments, "were incredibly vague and seemed enormously incoherent."

## RECOMMENDATIONS

- Continue with department-specific courses but change the marginalized treatment given to them by the departments.
- The course descriptions on the website need to be made more concise and content-specific.
- CFC Syllabi should be uploaded on to the College website.
- SYs would benefit from an orientation (around end August) regarding the CFC choices available to them.
- Students need to be made aware of the system of allotment of choices based on the software which has been designed by the college so as to prevent the perception of bias or arbitrariness. Emphasis should be placed on the correct method to fill the online form. Forms with erroneous or incomplete details are

PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.

NAAC SSR Cycle 4 (2015-2020):

2016 – 2017 CFC Course Feedback Reports\_Students



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

automatically screened out and given least priority despite their over-all percentage.

- It had been suggested that priority for CFC allotment could be based on the first and second semester SPC percentages rather than over-all percentages. However, the committee felt that this would be inappropriate as SPC marks were already being considered within the over-all percentages. Moreover, over-all grades reflect consistency and student effort more than that of a single compulsory course.
- Increase the range of choices offered to the students in each stream.
- The three lectures could be scheduled as a double and single during the week. This allows for conducting a short lab practical, workshop or structured exercise or screening a film / documentary with time for discussion.
- Have just one CIA but keep the modality flexible for departments.
- · Each department needs to rethink / review the kind of course and modules being offered. Must be perceived as relevant by the student group.
- Circulate the CFC feedback survey to the current SY batch at the beginning of the next academic year.

As a final comment, we would like to thank our Principal for giving us the opportunity to engage with each other in this committee as well as with staff and students, on this theme. Although some of the team members were only able to attend a couple of meetings, most of the others contributed in some form or the other. It was a pleasure to brainstorm and work with such a diverse group.

ARTS COMMITTEE

Ruby Pavri Convenor

SCIENCE COMMITTEE

Binoj Kutty Convenor

Date: 15th Mar. 2017

PRINCIPAL ST. XAVIER'S COLLEGIS (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

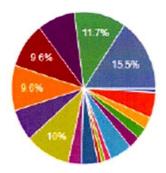
## CFC SURVEY STATISTICS - MAR 2017

QUESTIONS

RESPONSES

239

## Course you have enrolled for last year (Select one) (239 responses)



- Indian Culture The Philosophy Wi.
- International Economics Depart
- Literature and Resistance --- Depai
- An Introduction to Gandhian Studie...
- Fundamentals of the Indian Consti...
- Science of Culture --- Department...
   Science, Technology and Social C...
- Representing the Nation through t...
- à 1/3 ▼

- Management Accounting and Inves
- The Psychology of Relationships --.
- Descriptive Statistics --- Departme.
- The Art of Mathematics -- Departm...
- Garden Art Department of Botany
- Chemistry in Context: Applying Che...
- Nutrition & Reproductive Health —...
- Infectious Diseases: Staying Ahea...
- A 2/3 ▼

- Physics behind Astronomy,
   Photography and Technology-Department of Physics
- Web Designing --- Department of Information Technology
- Secret Lives of Animals— Department of Zoology

▲ 3/3 V





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

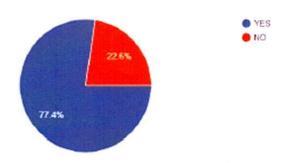
© 2262 0661/65

Revamping CFC

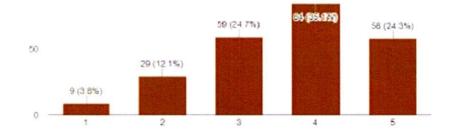
Report # 2

15th Mar. 2017

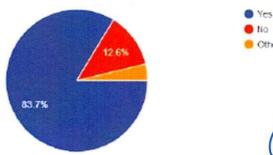
Did you get your choice of CFC offered (239 responses)



Were the course objectives clear at the start of the course? (239 responses)



Were the course objectives stated in the syllabus met? (239 responses)



ST. XAVIER'S COLLEGE

No Other

> (AUTONOMOUS) MUMBAI - 400 004.





(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

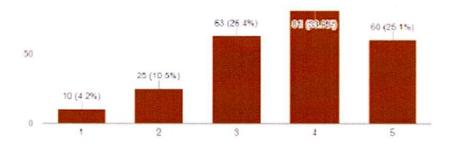
Revamping CFC

Report # 2

15th Mar. 2017

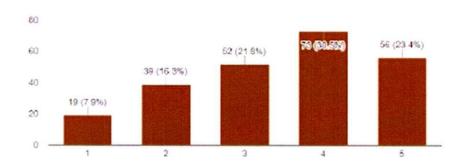
## Quality of the Teaching-Learning Experience

(239 responses)

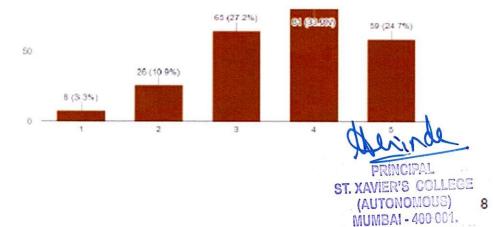


## Generation of interest in the subject

(239 responses)



## Effectiveness of the evaluation formats in CIA (239 responses)







(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

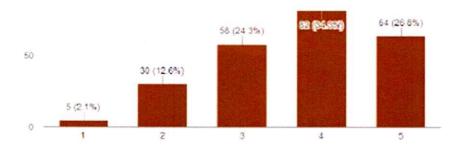
© 2262 0661/65

Revamping CFC

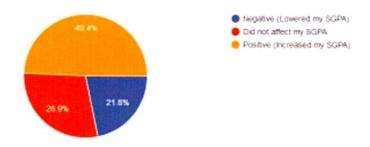
Report # 2

15th Mar. 2017

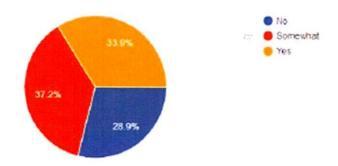
Effectiveness of the End Semester evaluation (239 responses)



Impact of the marks obtained in CFC on your overall SGPA (239 responses)



Has the CFC contributed to your personal development in any way? (239 responses)





ST. XAVIER'S COLLEGE 9 (AUTONOMOUS) MUMBAI - 400 001.



(AUTONOMOUS)

5, Mahapalika Marg, Mumbai - 400 001, INDIA.

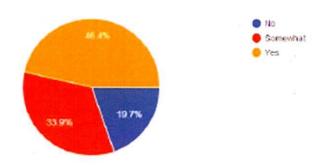
© 2262 0661/65

Revamping CFC

Report # 2

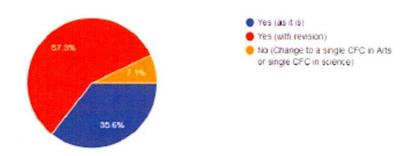
15th Mar. 2017

Has the CFC contributed to your intellectual development in any way?



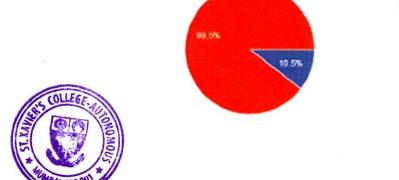
Should the current structure of diverse CFC linked to specific departments be retained

(239 responses)



Would a single common CFC in Science for all Arts students, and a single common CFC in Arts for all Science students, be better according to you?

(239 responses)





(AUTONOMOUS) 5, Mahapalika Marg, Mumbai - 400 001, INDIA.

© 2262 0661/65

Revamping CFC

Report # 2

15th Mar. 2017

Restructuring of diverse CFC should focus on changes in (You may choose more than one option. For 'Others', please specify the aspect for change)
(216 responses)

Course cont...

Instructor ex...

—68 (31.5%)

Teaching m...

—102 (47.2%)

Evaluation to...

—0 (27.8%)

Other

—14 (6.5%)

—20 40 60 80 100 120 140



PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.

11