

UNIVERSITY OF MYSORE

YUVARAJA'S COLLEGE



(Constituent Autonomous College with Potential for Excellence)
Accredited 'A' grade with CGPA 3.34 by NAAC

J.L.B. Road, Mysuru - 570 005, Karnataka, India



Admission to 5- Year Integrated M.Sc. in Molecular Biology

COLLEGE PROSPECTUS

2021-22

Department of Molecular Biology

(Estd 2005)

PRINCIPAL'S FOREWORD

Yuvaraja's College, Mysuru, a constituent autonomous college of the University of Mysore has a rich history. It was first established as an Intermediate College on 24th June 1928 and in the year 1947-48, after Independence, the college was upgraded to a First Grade College. In the year 1954, at the time of the celebration of Silver Jubilee, it was re-named 'Yuvaraja's College' to commemorate the association of His Highness Sri Jayachamaraja Wodeyar with the College. As a leading academic centre, it has been serving the cause of higher education since 1947. The college had the privilege of offering pre-medical courses for a number of years. Prior to the establishment of departments in the Manasagangotri campus some Postgraduate courses were also conducted in the college. The college is the oldest Constituent Science College offering B.Sc. course in the state. The college has been recognized by UGC under 2(f) and 12(B) of UGC Act and Government of Karnataka.

The University Grants Commission conferred Autonomous Status to the college in the year 2005. In 2015 the college has been conferred A Grade by NAAC with CGPA 3.34 on the 4 point scale. Over the years the college has endeavoured to achieve and maintain academic excellence through research, teaching, and extension activities. The institution has conferred the status of College with Potential for Excellence in 2010. Other noteworthy achievements include the introduction of Postgraduate programmes during 2006-2007. Currently, it offers various programmes leading to Integrated M.Sc., M.Sc., M.A., M.B.A., B.Sc., BCA, BBA and PhD degrees. This year Yuvaraja's College steps into the 92nd year of its service to the nation. The College constantly aspires to scale great heights in its quest for excellence in imparting human, intellectual, spiritual and moral knowledge to the students. Having successfully overcome the various impediments encountered on the way to its growth, the College has grown in stature and strength and has matured into one of the finest educational institutions dedicated to the pursuit of knowledge and excellence in the field of higher education.

> Dr B. N. Yashodha Principal



The emblem of the college is unique in its significance. It reflects an aspect of each of the national flag and the emblem of the University. The superscription on the emblem, *Sathyae Dharmaha Prathistitaha*— "Dharma is embodied in truth" – is meaningful.

The flame at the centre is symbolic of knowledge, which is eternal and timeless. The Ashoka Chakra at the centre with its 24 spokes implies that one should conform to *Sathya* or truth and *dharma* or virtue. The motto of the University as envisaged in its emblem is, "Nothing is Equal to Knowledge" and the second line, "I always uphold the truth" summarizes the vision, moral fabric and idealism of the founders and of the University.

Mission:

- ➤ To provide a meaningful educational environment, opportunities and experiences that enable students to grow, and prosper in their future life and career
- ➤ To sensitize learners towards inclusive social concerns, human rights and essential human values

Vision:

- > To prosper as a distinguished premier institution of higher education
- To thrive as a centre for intellectual activities
- ➤ To create a sustainable environment that promotes innovative and best practices in teaching and research

UNIVERSITY OF MYSORE YUVARAJA'S COLLEGE, MYSURU

(A Constituent Autonomous College with Potential for Excellence)

I About the University

The University of Mysore is one of the oldest Universities in India. Sri Nalwadi Krishnaraja Wodeyar, the benevolent ruler of Mysore and Sri M. Visveshwaraiah, an Engineer, statesman and the Dewan of Mysore were the pioneers in establishing this great University. The University came into existence on 27th July 1916. It was the fifth in the country and the very first in the erstwhile princely State of Mysore.

The University which made a humble beginning with Maharajas College at Mysore for Humanities and Central College at Bangalore for Science has grown into a renowned centre for higher learning. The jurisdiction of Mysore University is spread over four districts *viz.*, Mysore, Mandya, Hassan and Chamarajanagar.

The University of Mysore was first accredited by the National Assessment and Accreditation Council (NAAC) with Five Star status in the year 2000 and has been reaccredited in 2006 at A+ level again. NAAC reaccredited the University with A grade in 2013 in recognition of its academic excellence. The University of Mysore is ranked 54th among Indian Universities in the national ranking by NIRF 2019.

Directorate of Student's Welfare:

- ➤ The Directorate of Student's welfare looks after the student welfare in the University
- ➤ Various financial assistance programmes, like financial assistance to physically challenged students are taken up.
- ➤ Also, co-curricular activities such as Literary and Cultural competitions, Inter-collegiate and Inter-University Competitions are organized.
- ➤ University level Inter-collegiate Cultural Competitions to identify the best talent in literary and cultural activities. Winners are sent to the South-Zone Youth Festival, National and International Youth Festival hosted by AIU.

- ➤ Debate Competition in co-ordination with the Karnataka State Cooperative Dept. and Indian Association of Parliamentarians on population and development, New Delhi.
- At the college level cultural and other extra-curricular activities are conducted. To facilitate the conduct of these activities there is an open-air auditorium in the college quadrangle and an auditorium in the Centenary Building.

Hostels:

The Directorate of Students Welfare provides accommodation to the students who are admitted to the PG and UG courses and also provides accommodation facilities to those ladies who are working in and around Mysore in the Working Women's hostel. Under the purview of DSW, there are 19 hostels.

Sports:

Spacious sports grounds, a Gymnasium and a Swimming Pool are maintained by the Department of Physical Education, the University of Mysore for the benefit of our students. A Category I multipurpose indoor hall with facilities for badminton, table tennis, chess, and other sports activities is available. Adjacent to this, a multi-gym facility is available to the students of the college.

Postal Services:

The Department of Posts and Telegraphs has postoffices on both the campuses with telegraph services. There is a speed-post facility.

Banking Services:

The State Bank of Mysore has its branches in the University Campus with ATM facility.

Transport Service:

KSRTC City buses ply through the campus traversing all localities of the city at a frequency of once in every 20 or 30 minutes. The University/College campus is located at a distance of 3 km from the Central Bus Stand and 1.5 km from the city Railway Station.

Employment Information Bureau:

The University Employment Information and Guidance Bureau (UEIGB) situated at MGM, provides information on the courses and career prospects through literature and booklets displayed in the Bureau and through lectures and seminars held in various colleges.

Scholarships:

State and Central Governments instituted several scholarships for the meritorious and deserving students. Special scholarships for children of political sufferers, defence personnel and the physically handicapped are also offered. The students of SC/ST, Cat.I, IIa, IIb, IIIa and IIIb categories have the benefit of free studentships up to a prescribed income limit. The University also provides financial assistance to physically challenged students.

SC/ST Cell:

There is a separate SC/ST Cell to look after the welfare of the SC/ST students, research scholars and employees. Research Fellowships are awarded through the Cell every year for SC/ST students.

Foreign Students' Cell:

Foreign students are assisted by the Foreign Students Adviser regarding their admission and accommodation. The office is located at Fine Arts College, Manasagangotri, Mysuru.

About Yuvaraja's College

Yuvaraja's College is one of the constituent colleges of the University of Mysore. The college attained Autonomous Status in the academic year 2005-06. It offers to study the maximum number of branches in Science like Computer Science, Electronics, Microbiology, Sericulture, Biochemistry, Environmental Science, Statistics, Food Science and Nutrition, Geology, etc. In addition to the basic science subjects, BBA and BCA (Bachelor of Computer Applications) courses are also offered.

In the erstwhile Princely State of Mysore, when this college was first established as an Intermediate College in June 1928, there were very few colleges in the state. The foundation stone of the College was laid on 8th August 1927 by the then Vice-chancellor of the University of Mysore, Sir K.

Brajendranath Seal who was a great educationist of that time. With the dawn of independence, in the year 1947-48, the College was upgraded to a First Grade College. In the year 1954, the Silver Jubilee of the college was celebrated and the last Maharaja of the erstwhile Princely State of Mysore, His Highness Sri Jayachamaraja Wodeyar, inaugurated it. To commemorate the occasion, the college was rechristened "Yuvaraja's College" as His Highness himself was a student of the Intermediate Course in this hallowed institution during 1934-36. Many noted scientists, poets and men of letters of this country were the students of this great institution.

This is a **multi-faculty College**, with three years B.Sc, BCA, BBA and two-year M.Sc. in Chemistry, Botany, Physics, Food Science and Mathematics MBA, M.A. in English and five-year Integrated M.Sc. Molecular Biology. **CBCS** scheme has been introduced for the **Postgraduate** courses and the B.Sc. course.

Every year the college brings out a magazine titled, *Yuvachintana* which provides the students of the college a platform to express their views on varied subjects and express their creativity.

The College has been awarded 'A' Grade by NAAC with CGPA 3.34 on the 4 point scale.

SUPPORT SERVICES

- **a) HOSTELS:** The following hostel facilities are available for undergraduate/postgraduate students/working women.
- Yuvaraja's College Hostel for Men
- University Hostel-II
- Yuvaraja"s College Ladies Hostel
- PG Ladies Hostel, Manasagangotri

The students who require hostel facilities are required to approach the Faculty Advisor concerned in each hostel.

b) LIBRARY: A library for undergraduate students with a study centre takes care of the needs of the students of Yuvaraja's College. The students can also

access more than 2100 journals and 51,000 e-books through NLIST programme offered by UGC-INFLIBNET Centre, Ahmadabad.

- c) **BOTANICAL GARDEN:** The college has a botanical garden with an excellent variety of plants to cater to the needs of students of Botany and Life Sciences. The college is devoted to the aesthetic maintenance of greenery. The campus has lush green lawns and medicinal and flowering trees and shrubs.
- **d) HEALTH CENTRE:** There is a well-equipped Health Centre adjacent to the canteen for the students and staff of both Yuvaraja's College and Maharaja's College.
- e) LANGUAGE LAB: An English Language Lab in the college enables students to acquire skills in English reading, writing, speaking, pronunciation, vocabulary, grammar and communication.
- **f) NCC and NSS:** There are NCC (Naval Wing) unit and NSS Unit (National Service Scheme) in the college. A student is eligible to join any one of these service organizations.
- **g) CAFETERIA:** The college cafeteria is located on campus. It offers a variety of food items at subsidized rates.
- **h) Wi-Fi:** The college has campus-wide Wi-Fi connectivity with 1.0 GBPS speed.
- i) SCHOLARSHIPS: Post-matric scholarships of Government of India for SC/ST students, scholarships of The Directorate of Backward Classes and Minorities in Karnataka, Special Scholarship for Children of political sufferers, defence personnel, physically challenged and Endowment Scholarships etc., are available. There are gold medals and cash prizes instituted by the teachers of the college and philanthropists for the students who score the highest marks in some subjects. Free studentships are available for students belonging to category I, IIa, IIb, IIIa and IIIb with a certain annual income limit.
- j) CO-OPERATIVE SOCIETY: A Co-operative Society housed in the college building is exclusively run by the share amount of the students of

Yuvaraja's College. The society provides the students with practical records, notebooks and stationery material on no loss no profit basis.

- **k) PLACEMENT CELL:** The Placement Cell of the college organizes regular counselling and competence enhancement classes and programmes for the students. Career Guidance programmes are also conducted by the placement cell.
- **I) WOMEN EMPOWERMENT CELL:** The Women empowerment cell deals with the problems faced by the girl students of the college.

About 5-Year Integrated M.Sc. Course in Molecular Biology

- Molecular Biology is on the fast-expanding frontiers of Biological Sciences. It is a rich multi-disciplinary science combining various biological divisions.
- A unique course, which provides an integrated master's degree in Molecular Biology.
- It is five years duration. Students from India and abroad with PUC/10+2 or equivalent qualification in Science stream with at least 45% marks in aggregate (excluding languages) and at least 45% marks in Biology are eligible to apply. This is relaxable by 5% for SC/ST candidates.
- Total student intake is 20+2 (foreign seats).
- Admission to this course is done based on the entrance test during June every year.
- It is a course under the partially self-financing scheme of the University of Mysore. It comprises of 10 semesters.
- Choice Based Credit System (CBCS) is being followed in the course since 2011-12. Students have to obtain an average of 20 credits/semester and need to earn 200 credits by the completion of the course. These credits are offered for course papers, projects etc.
- Seminars and tests are conducted in each semester for the evaluation of the students.
- During the eighth semester, students are taken on an educational tour to different research institutes of our country.
- The tenth semester is devoted exclusively for carrying out project work in reputed research institutions.

CAREER OPPORTUNITIES:

- A doctoral degree can be pursued with UGC/CSIR/ICMR etc. with fellowships
- Employment as research scientists and associates in molecular biology, cell biology, biotechnology laboratories of the research institutes.
- As professional molecular biologists employed in research and development (R&D) wing of Life science/biotech industries.
- As faculty in private or public universities, university research institutes and government departments.

INFRASTRUCTURE:

- ✓ The department has been equipped with modern facilities for classroom teaching and practical laboratory experiments.
- Expert teachers and scientists are invited as visiting faculty for the course. Special lectures, seminars and workshops are arranged periodically to give exposure to the students.
- ✓ The departmental library has textbooks on the subjects of basic sciences and other allied fields. Research journals, project reports and other special publications are also available. This is supplemented by the college library which is open to students throughout the year.
- ✓ Students are provided with a computer lab and internet facility.

ADMISSION DETAILS:

<u>Eligibility:</u> Students from all over India, who have completed the Pre-University or equivalent course in the science stream with at least 45% marks in aggregate (excluding languages) and at least 45% in Biology are eligible. This is relaxable by 5% for SC/ST candidates. They should not exceed 20 years of age as on the date of application and they should not be degree holders of any university.

<u>Application form:</u> Candidates can apply for this course by applying through an online application form available at <u>www.ycm.uni-mysore.ac.in</u> by online payment of Rs. 500/-

When the application is being submitted it is required to upload the **caste and income certificate** with validity for the year 2020-21, failing which the student would be considered for admission under General Merit only. The certificates submitted after the last date for submission of applications would not be valid.

It is required to upload the S.S.L.C Marks card, II PU/12th Provisional Marks card (Internet copy /Provisional marks card), latest passport size photo and the soft copy of the signature of the student.

Those students who have studied 11th & 12th std under CBSE, ICSE scheme and other than Karnataka pre-university examination board students are required to produce the eligibility certificate issued by the University of Mysore, Mysuru at the time of counselling cum admission

Entrance Examination: A compulsory entrance test will be held at the national level which will be conducted at Yuvaraja's college Mysuru.

Entrance Examination is conducted for a maximum of 50 marks. 50 Multiple choice questions (MCQs) with 1 mark for each question (Question paper contains 30 questions from Biology, 10 Questions from Chemistry and 5 Questions from Physics and 5 questions from Mathematics). Merit list will be prepared by taking 50% of the marks scored in the optional subjects in the qualifying examination (PUC/10+2/equivalent) and the marks scored out of 50 obtained in the Entrance examination. Entrance examination syllabus is based on the PUC/10+2/equivalent syllabus content and it is uploaded in the website.

Instructions related to the admission procedure will be uploaded in the website along with the Merit list to be prepared after the entrance examination.

Tentative Calendar of events for admission to 5-Year Integrated M.Sc., in Molecular Biology

Sl. No	Events	Dates		
1.	Issue of Notification	04.09.2021		
2.	Issue of Applications from	06.09.2021		
3.	Last date for issuing and submission of Applications	01.10.2021		
4	List of Eligible Candidates for Entrance Exam	08.10.2021		
5.	Conduct of Entrance Examination	12.10.2021		
6.	Announcement of Result (Provisional Merit			
7.	Admission of Candidates through counselling from the Merit Listed candidates (both Scheme A and B)	Notified later in Yuvaraja's College website (www.ycm.uni-mysore.ac.in) and Notice Board		

FEE STRUCTURE:

SCHEME	GM, IIA, IIIA, IIIB, SC, ST, Cat-1 & II B	GM, IIA, IIIA & IIIB (Income Below 1,00,000/-)	CAT-1 (Income Below 2,50,000/-)	SC/ST (Income Below 2,50,000/-)	Other State	Foreign Nationals
Scheme A	21,500/-	17,290/-	17,290/-	210/-	33,500/-	47,900/-
Scheme B	71,720/-	67,510/-	67,510/-	25,320/-	83,720/-	98,120/-

RULES REGARDING DISCIPLINE

- 1. The college considers all its students as mature and responsible citizens and therefore expects them to conduct themselves well and not indulge in any unhealthy/unlawful practices.
- 2. The students are expected to follow the rules and regulations framed by the University /College and notified from time to time.
- 3. Students should attend theory and practical classes punctually to have a minimum of 75% attendance in each subject.
- 4. They are expected to attend the classes neatly dressed and should bring notebooks, texts and practical records for their studies every day.
- 5. They are required to be polite with the teachers, the officials of the college and library, their college-mates and the public in general.
- 6. They should endeavour to keep the college premises, the classrooms, the library, the laboratories and corridors clean.
- 7. They should maintain silence in the college campus as well as in the library, reading room, corridors and classrooms.
- 8. **RAGGING** AND SUCH OTHER ANTI-SOCIAL ACTIVITIES WILL BE TREATED WITH A HEAVY HAND.
- 9. **SMOKING AND USE OF DRUGS AND NARCOTICS** IN THE COLLEGE PREMISES IS STRICTLY PROHIBITED AND FAILURE TO BE COMPLIANT WILL INVITE STRINGENT ACTION.
- 10. USE OF CELL PHONES IN THE COLLEGE PREMISES IS STRICTLY PROHIBITED.
- 11. Parking of vehicles should only be in the parking space provided by the college with a prescribed parking fee.
- 12. The student should safeguard the property of the college and not indulge in activities, which may damage it.
- 13. Whenever a student goes to the office or the Library or the Principal it is mandatory that he/she carries his/her **Identity card** and shall produce it to the Principal or at the library, when asked to do so.
- 14. It is the responsibility of the students to see all the college notice boards and departmental notice boards regularly.
- 15. Students are advised to contact the Directorate of Students' Welfare for guidance/advice.
- 16. Parents/Guardians of students are invited to meet the members of the teaching staff and the Principal as often as possible to ascertain the progress of their wards. The authorities hope that the parents will extend their full co-operation in the onerous but glorious task of shaping their children into educated and responsible citizens.
- 17. Those who stay in the hostels are not expected to keep unauthorized persons in their rooms. In case of violation, the student responsible will be rusticated from the college.

STOP RAGGING

The Honorable Supreme Court of India has strictly banned ragging in Educational Institutions as per the UGC letter No. F1-8/2006. If any incident of ragging comes to the notice of the authorities, the students concerned shall be given a chance to explain and if his/her explanation is not found satisfactory, the authority would expel him/her from the institution. Ragging includes disorderly conduct whether by words – spoken or written or by an act which has an effect of teasing, treating and handling with rudeness any other student, indulging in rowdy behaviour or indiscipline, which cause or are likely to cause hardship or psychological harm or apprehension to a fresher or any student.

Following measures are taken:

- Online anti-ragging undertakings to be taken from selected students in the form of affidavits duly attested by the students and also by their parents/guardians at the time of admission to the institution.
- Committees such as Disciplinary Committee, Anti-ragging Committee etc., are formed to assist college authorities in curbing the menace of ragging.
- Anti-ragging squads are formed to conduct regular and surprise checks all around the campus, hostels, classrooms and other places where students are vulnerable to ragging.
- Instructions are given to the members of the Anti-ragging Committee as well as other Committees to remain vigilant at all hours all around the campus and to conduct surprise checks.
- Anonymous surveys among students are conducted to check whether the campus is indeed free from ragging.
- Anti-ragging slogans, posters, sign-boards etc., are displayed to create awareness among students.

The following are anti-ragging helpline number and websites for reporting incidents of ragging occurring in any college:

National Anti-Ragging Helpline 1800-1805522 (Toll-Free)

Email: helpline@antiragging.in

Ask's website: <u>www.amanmovement.org</u>

UGC'S website (www.ugc.ac.in) email: raggingcell@yahoo.co.in

ADMINISTRATIVE ACTION AGAINST SEXUAL HARASSMENT/VIOLATION OF HUMAN RIGHTS/RAGGING:

The institution shall punish a student found guilty of Sexual harassment/Violation of human rights/ ragging after following the procedure and in the manner prescribed herein under:

- Suspension from attending classes and academic privileges.
- ❖ Withholding/withdrawing scholarship/fellowship and other benefits.

- Debarring from appearing in any test/examination or other evaluation processes.
- Withholding results.
- ❖ Debarring from representing the institution in any regional, national or international meet, tournament, youth festival etc.
- Suspension/expulsion from the hostel.
- * Rustication from the institution for a period ranging from one to four semesters.
- Expulsion from the institution and consequent debarring from admission to any other institution for a specified period.
- NOTE 1: All the original documents should be produced at the time of admission failing which the allotted seat will be cancelled. Admission of candidates to the course is subject to the provisions of Mysore University Students' (Disciplinary Control) Ordinance, 1989.
- NOTE 2: Fee once paid at the time of admission or any other time is not refundable. any request in this regard will not be entertained.

