



To
The Principal
Government First Grade College for women, Jamkhandi

Respected Sir,

Subject: Requisition for approval of ADD- ON course for BSc. Students.

I Prof.Pushpa .N.Awanti Assistant Professor of Physics is intend to start ADD - ON course for the BSc. Students for the academic year 2019-20. I request you to approve for the above said course.

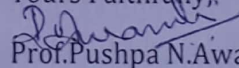
The course details are as follows

S.NO	Name of the Course	Faculty In charge	Target Audience
1	Plasmonics: From Fundamentals to Modern Applications	Prof.Pushpa N.Awanti	Final Year BSc. Students

I kindly request you to permit us to start the above course.

Thanking you,


Principal,
Govt. First Grade College for Womens
JAMKHANDI-587301, Dist:Bagalkot

Yours Faithfully,

Prof.Pushpa N.Awanti
H.O.D.
Department of Physics
G.F.G.C. W. JAMKHANDI

About the course	<p>Within the framework of the course, we will discuss in details the fundamental principles of light interaction with plasma oscillations in solid state. By passing our course you will:</p> <ul style="list-style-type: none"> • step-by-step learn the field of plasmonics starting from optical properties of metals to the latest applications of plasmonic nanostructures • Get the minimal theoretical background, which will be illustrated and supported by the describing experimental techniques and discussing the cutting edge scientific results. • Get a hands-on experience on how to describe the plasmons in various nanostructures such as single metallic nanoparticles, nanoparticle oligomers and periodic arrays, plasmonic waveguides and wires. • In the final part of the course, you will have an overview of application of plasmonics in chemical biosensing, nanolasing, light trapping, and optomechanical control. <p>The course is divided into five sections:</p> <ul style="list-style-type: none"> • Electromagnetic properties of metals • Surface plasmon-polaritons • Localized surface plasmon resonances • Bulk plasmon-polaritons • Applications of plasmonics
Objective	<p>This course is aimed for graduate and undergraduate students who are studying in physics related to optics. As well as researchers who want to gain or deepen their knowledge in the field of modern photonics. This course can give a boost to your educational or academic career, and potentially will stimulate you to conduct your own research in this field..</p>
Time table	30 hours

Pravanki
H.O.D.
Department of Physics
G.F.G.C. (W. JAMNAMPAL)





GOVERNMENT OF KARNATAKA
 DEPARTMENT OF COLLEGIATE EDUCATION
GOVERNMENT FIRST GRADE COLLEGE, FOR
WOMEN, JAMKHANDI-587301

E-mail: principal.gfgcwjkd@gmail.com

Accredited by "B" Grade

Website: <http://www.gfgcwj.edu>

ADD – ON Course on “Plasmonics: From Fundamentals to Modern Applications”

Overview of the Course

Course Title	“Plasmonics: From Fundamentals to Modern Applications”
Department	Dept. Of Physics
Duration	30 Hours
Mode of Teaching	Classroom
Course Instructor	Prof.Pushpa N.Awanti Assistant Professor of Physics
Target Audience	A student who registers for this course should be able to: Gain a wide view on the physics of light interaction with metal nanostructures. In this course, they will learn about the whole diversity of unique effects appearing at the junction of nanotechnology, sub wavelength optics, quantum mechanics, and solid state physics. They will find out how giant field enhancement near metallic nanostructures can be used for detecting single bio molecule, and whether it is possible to build a nanometre scale laser.