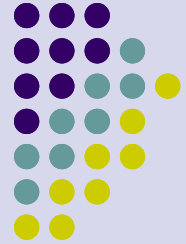


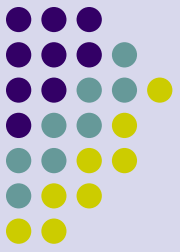
HOW TO UPGRADE RESEARCH SKILLS FOR POSTGRADUATE STUDENTS WITHIN PRELIMINARY STAGE



by

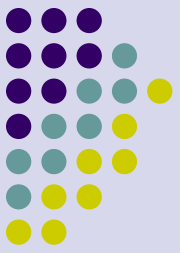
Dr. SUHAD MOHAMMED

Learning process and its Goals

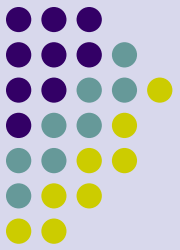


- Higher order skills and knowledge expected to be transferable
- encourage and advocating post graduates to contribute in department activities
- Facilitate research management during second year of studying
- Facilitate writing process for students (research papers and thesis)
- Publishing experience

Success depends on :-



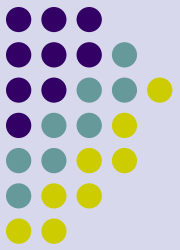
- understanding postgraduates capabilities
- Encouraging motive and ambitions
- Time available
- Lab facilities
- Selecting of research subject
- and managing of research



RESEARCH METHODOLOGY

OBJECTIVES AND GOALS

Presentation Skills



What is presentation?

5 BASIC Q'S:-

Who

What

When

Where

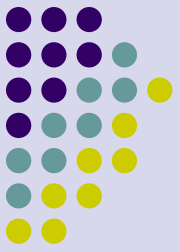
Why

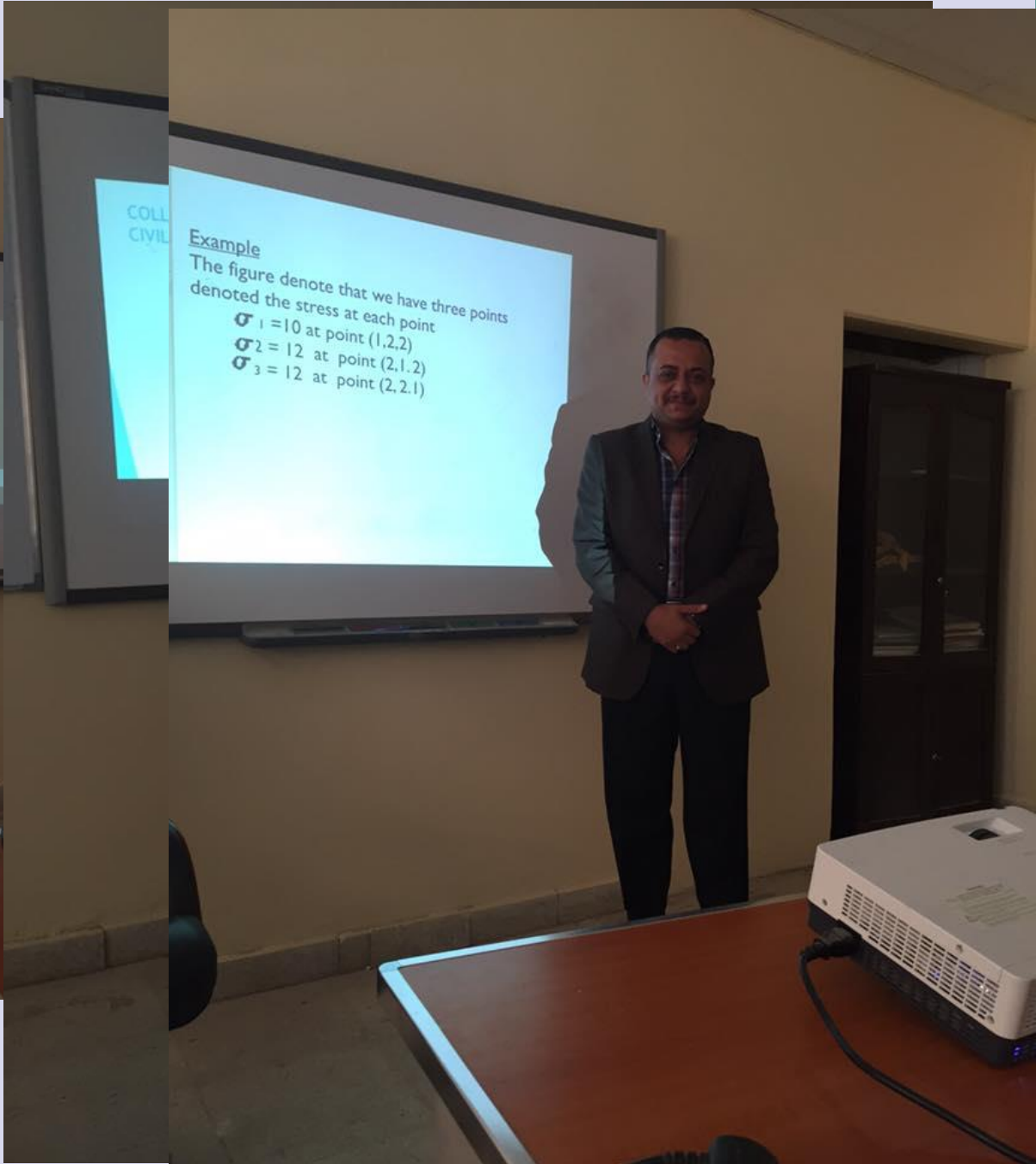
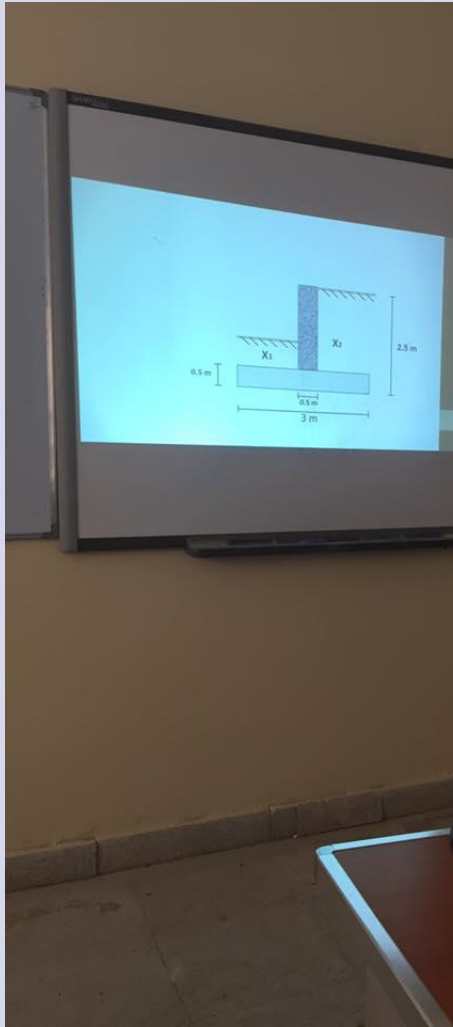
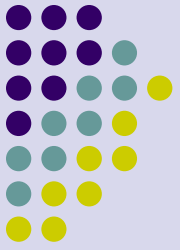
Structure of presentation

Visual aids

Human element

Presentation skills





COLL
CIVIL

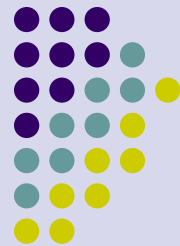
Example

The figure denote that we have three points
denoted the stress at each point

$$\sigma_1 = 10 \text{ at point } (1,2,2)$$

$$\sigma_2 = 12 \text{ at point } (2,1,2)$$

$$\sigma_3 = 12 \text{ at point } (2,2,1)$$



...tion of lpp- simplex method
... problem



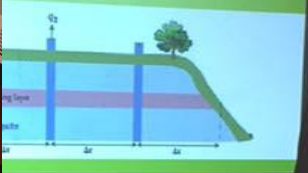
OPTIMAL SOLUTION BY Linear Programming simplex method-I

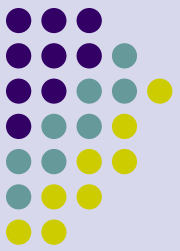


Ass. prof. Dr Abbas Mahde Abd
Stu: QASSIM IBRAHEM HUSEEN



...quifer with one-dimensional
... shown in Fig.
... to maximize the hydraulic head
... rates and determine the
... n well

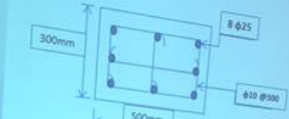




Reverse Learning Process

Example in simplex method

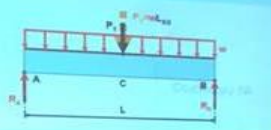
Prepared by
Rowadah Hussein Ali



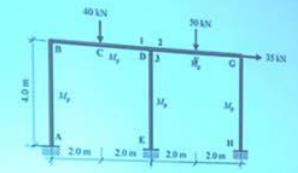
$$\begin{aligned} Z - 30X_1 - 12X_2 + 0X_3 + 0X_4 + 0X_5 &= 0 \\ 800X_1 + 600X_2 + X_3 + 0X_4 + 0X_5 &= 60900 \\ 120X_1 + 80X_2 + 0X_3 + X_4 + 0X_5 &= 4800 \\ 600000X_1 + 200000X_2 + 0X_3 + 0X_4 + X_5 &= 20000000 \end{aligned}$$



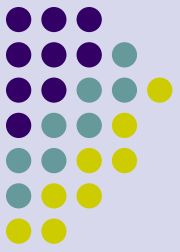
In my presentation I will find maximum moment for a simply supported beam with (4m) length carried a uniform distributed load (w) and axial load (p) as shown in fig below



Example – Structural Design

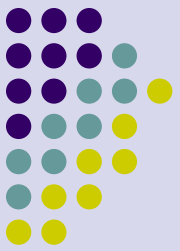


Research Management

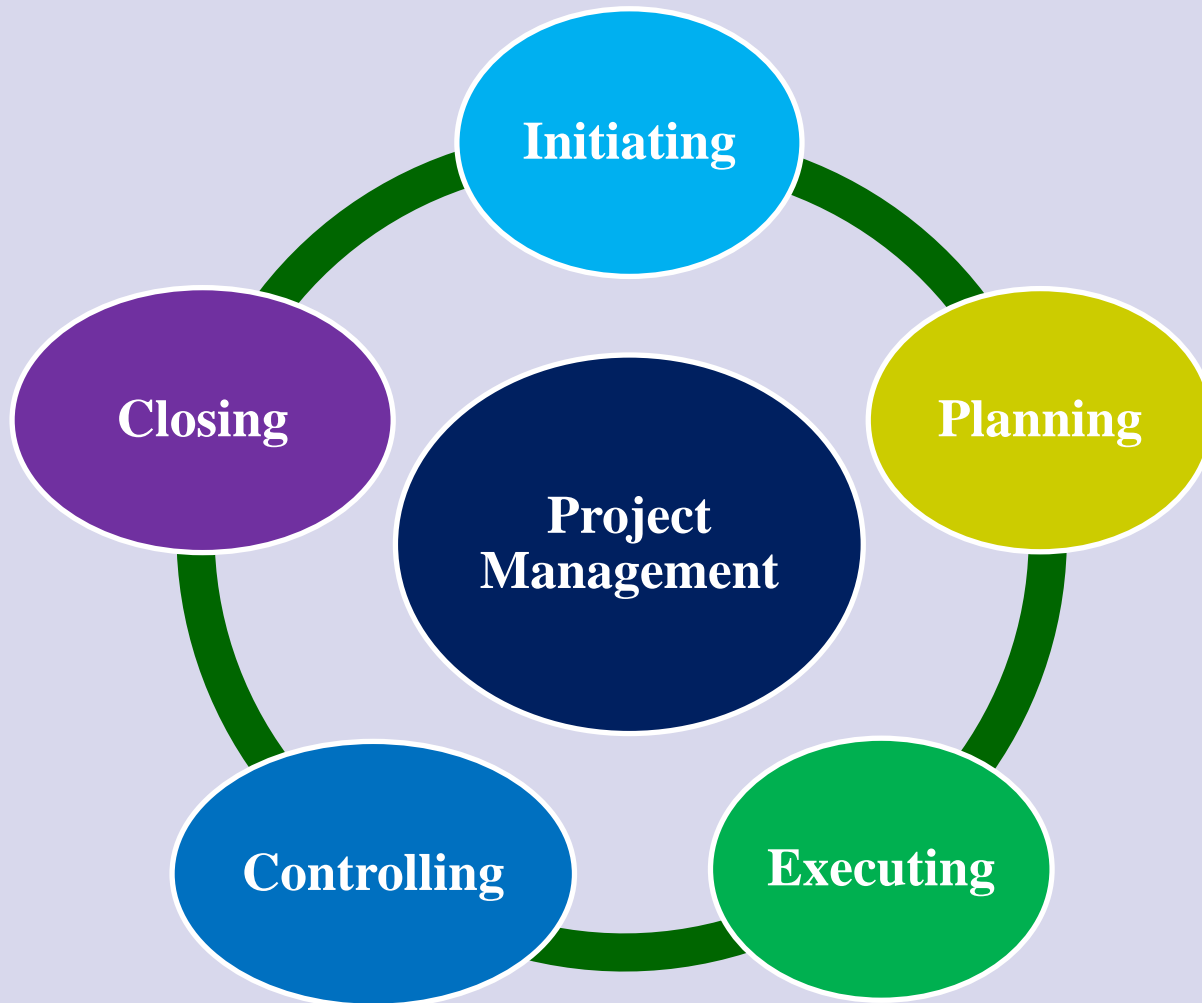


- Understanding research concept
- Managing your research
- Research and Innovation
- High-Quality Research
- What Research Is
- What Research Is Not
- Scheduling your Research
- Time Management
- Supervisory Relationship

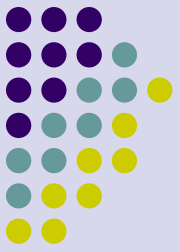




Project Management Processes



How to write a research paper



The Research Paper



Why do you need to learn how to write a research paper?

➤ In your master study, you will be asked to write research papers, and you need to learn what goes into writing a successful paper.

➤ This PowerPoint presentation will give you step-by-step directions on how your teachers/professors expect you to write a basic research paper.

Learning Targets:

1. How to choose a topic?
2. How to write a thesis or introductory statement?
3. Understand the difference bet. plagiarism and acceptable plagiarism
4. Learn how to use "parenthetical notations."
5. Bibliography & proper format



Quoting means
to **REPEAT**
another *SOURCE*
word for word,
using **quotation marks**.



*P*arenthetical
Citations



**BE
ORIGINAL
AND
DON'T
PLAGIARIZE**

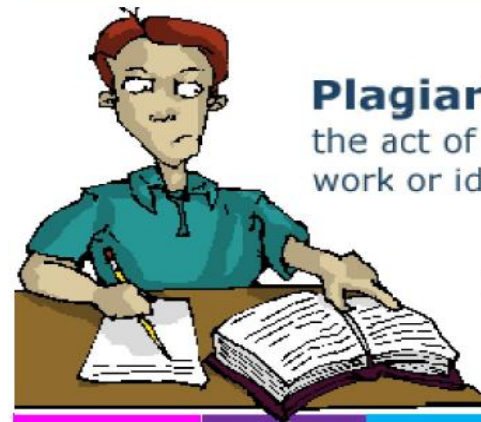
PLAGIARISM

1. Passing of someone else's work as your own, whether we do this deliberately or not.
2. Not acknowledging when using information (i.e. data, tables, figures or graphics) from other writers.
3. Inadequately paraphrasing a source.

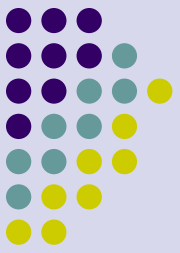
Paraphrase!!!

Plagiarism:

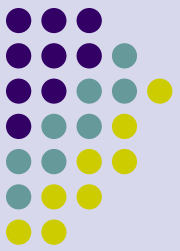
the act of presenting another's work or ideas as your own.



How to write your Thesis

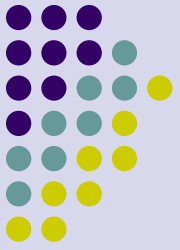


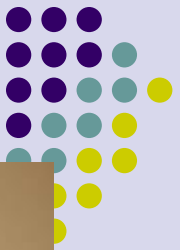
- Where to Start?
- What does thesis mean?
- For whom Your Thesis is Written
- Separating your work from others
- Presentation and Style
- Deadline of submission
- Format and Structure
- **CONFIDENCE!**



Learning transfer







اخبار الكلية

محاضرة تفاعلية في قسم الهندسة المدنية بين طلبة الدراسات العليا وطلبة الدراسات الأولية

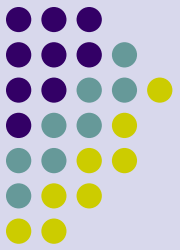
266 مشاهدة
★★★★☆
2 |

تحديث 11:14 21/04/2016 صباحا

يرعاية السيد رئيس قسم الهندسة المدنية الأستاذ المساعد الدكتور حافظ إبراهيم قام قسم الهندسة المدنية محاضرة تفاعلية بين طلبة الدراسات العليا الماجستير / فرع الإنشاءات وطلبة الدراسات الأولية / المرحلة الثانية لمادة تكنولوجيا الخرسانة بإشراف الأستاذ المساعد الدكتورة سهاد محمد عبد وقد شارك بالقاء المحاضرة كل من طلبة الماجستير همام عبد السّار و فهد محمد وكان موضوع المحاضرة تصميم الخلطات الخرسانية باستخدام الطريقة الامريكية (ACI) والطريقة البريطانية (B.C) وتميزت المحاضرة بالتفاعل الإيجابي بين طلبة الدراسات الأولية وطلبة الدراسات العليا علما بان هذه التجربة تم اجراءها سابقا وحقت نتائج جيدة جدا بشهادة طلبة المجموعتين كأشوب في التقييم المرجح .



Application of learning process (outcomes):



- **TECHNICAL WRITING**
- **SIMPLE RESEARCH EXPERIENCE**
- **MANAGING RESEARCH (NO. OF SAMPLES & NO. OF TESTS)**
- **DATA INTERPRETATION**
- **SCIENTIFIC PAPER WRITING**
- **PUBLISHING WITH A JOURNAL**
- **SUBMITTING**
- **JOURNAL STYLE**
- **PAYMENT PROCEDURE**
- **ACCEPTANCE**

Research Paper

PRODUCING GREEN CONCRETE USING WASTE PLASTIC

Suhad M Abd¹, Fahad Mohammad^{2*}, Humam Abdul-sattar³ and Mais Malallah³

*Corresponding Author: **Fahad Mohammad** ✉ fahadbahlol22@gmail.com

One step of societies' development scientifically, geometrically and industrially is intellectual integration with human necessity. This study focused on producing green concrete by using waste plastic as a partial replacement for sand by 0%, 25%, 50% and 70% respectively (by volume). This study will determine the efficiency of reusing waste plastic in the production of concrete comparing with the normal concrete. All of the concrete mixtures were tested at room temperature including performing slump, density and compressive strength. Eighteen cubes were molded for compressive strength and fresh density tests; curing ages of 7 and 28 days for the concrete mixtures were applied in this work. The results showed a fall of compressive strength at 28 days about 35% and 71% of the concrete containing 25% and 70% of waste respectively and showed that we can use wastes and by-product materials as a sand-substitution aggregate and also reduce the cost of some materials, and with that green concrete born.

Keywords: Waste plastic, Green concrete, Compressive strength, Slump, Density

INTRODUCTION

The productive use of waste material represents a means of alleviating some of the problems of solid waste management (Davis and Cornwell, 1998) from different points of view, it is important to reuse waste plastic. It helps to save and sustain natural resources that are not replenished, it decreases the pollution of the environment and it also helps to save and recycle energy production processes. Wastes and industrial by-products should be considered as potentially valuable

resources merely awaiting appropriate treatment and application. Waste plastic among these materials, the disposal of waste plastic has a harmful effect on the environment because of their long biodegradation period and using them in other industries and applications will reduce their negative effect on the environment (Hassani et al., 2005). Concrete plays an important role in the beneficial use of these materials in construction. Although some of these materials can be beneficially incorporated in concrete, both

¹ Assistant professor, Civil Engineering Department, University of Diyala, Iraq

² Civil Engineer, Civil Engineering Department, University of Diyala, Iraq



Research Paper

EFFECT OF USING CORN STARCH AS CONCRETE ADMIXTURE

Suhad M Abd^{1*}, Qassim Y Hamood², Alaa S Khamees³ and Zainab H Ali⁴*Corresponding Author: **Suhad M Abd** ✉ suhadukm@yahoo.com

Admixtures are used to alter the properties of concrete. Admixtures are substances introduced into a batch of concrete during or immediately before its mixing. There are numerous benefits available through the use of admixtures such as: improved quality, coloring, greater concrete strength, increased flow for the same water-cement ratio, enhanced frost and sulphate resistance, improved fire, lower density and improved the type of cement, mix proportions. In this particular study use of corn starch. The starch is added for test. The compressive strength of concrete increases with the addition of 1% of corn starch. Compressive strength increase in the addition of admixtures such as corn starch. The additional cost of use

Keywords: Concrete admixtures

INTRODUCTION

Admixtures are incorporated in today's world in order to achieve. This in effect improves the properties of hardened concrete. The use of admixtures on properties of concrete for example on a lot of factors such as groups, chemical configuration, weight (Ouyang et al., 2015).

¹ Department of Civil Engineering, C

This article



Research Paper

EFFECTIVE REPLACEMENT OF FINE AGGREGATES BY EXPANDED POLYSTYRENE BEADS IN CONCRETE

Suhad M Abd¹, Dhanya Gh.², Maan Hattem^{3*} and Dunya Khalil⁴*Corresponding Author: **Maan Hattem** ✉ dyaalotphousing@yahoo.com

With the increase in demand for construction materials there is a strong need to utilize alternative materials. This investigation is to study the effect of replacing weight concrete containing with those of the normal weight concrete. The replacement of cement to fine aggregates. The use of expanded polystyrene beads in concrete influences the properties of concrete. It is found that compressive strength of concrete were 41%, 38%

compressive strength

is a cause of concern to the construction industry. In this study, it is attempted to study the effect of replacing coarse aggregates by means of expanded polystyrene beads. A general discussion on EPS and its application along with other materials are being discussed. The use of expanded polystyrene beads as a lightweight cellular plastic material in concrete. The use of spherical shaped particles which are composed of about 98% air and 2% of polystyrene. It has a closed cell structure and is very light. It has a good sound and

reem@ma.php



Research Paper

THE EFFECT OF RUBBER CRUMBS ON PROPERTIES OF CONCRETE

Suhad M Abd^{1*}, Naqham N Abbas², Rowedah H Ali³ and Mustafa A Farhood⁴*Corresponding Author: **Suhad M Abd** ✉ suhadukm@yahoo.com

Crumb rubber is a material produced by shredding and comminuting used tires. There is no doubt that the increasing piles of tires create environmental concerns. The long term goal of this research is to find a means to dispose of the crumb rubber in Portland cement concrete and still provide a final product with good engineering properties. Several trial mix with replacement with rubber (5%, 10%, 15%) of coarse aggregate and 5% of fine aggregate. Concrete laboratory tests included slump, density and compressive strength. The slump decrease with increase of crumb



373 مشاهدة | 2

تحديث 07/08/2016 9:32 مساءً

برعاية ودعم عمادة كلية الهندسة ومساندة قسم الهندسة المدنية وفي خطوة علمية متميزة تهدف الى تطوير الإمكانيات البحثية وتعزيز القدرات العلمية لطلبة الماجستير - السنة التحضيرية وكثيرة لما درسه الطلبة في مادة منهجية البحث العلمي في الفصل الدراسي الأول واستكمالاً للجزء التطبيقي لمادة تقنيات الخرسانة المتقدمة في الفصل الدراسي الثاني والتي تدرسها الأستاذ المساعد الدكتور سهاد محمد عبد وياشرفها ومساهماتها العلمية والفنية تمكن مجموعة من طلبة السنة التحضيرية لدراسة الماجستير في قسم الهندسة المدنية من نشر أربعة بحوث في إحدى المجالات العلمية العالمية "International Journal of Engineering Research and Science & Technology" (IJERST) والمصنفة ضمن عدة ادلة عالمية منها دليل الفهرسة العالمي (Index Copernicus International)

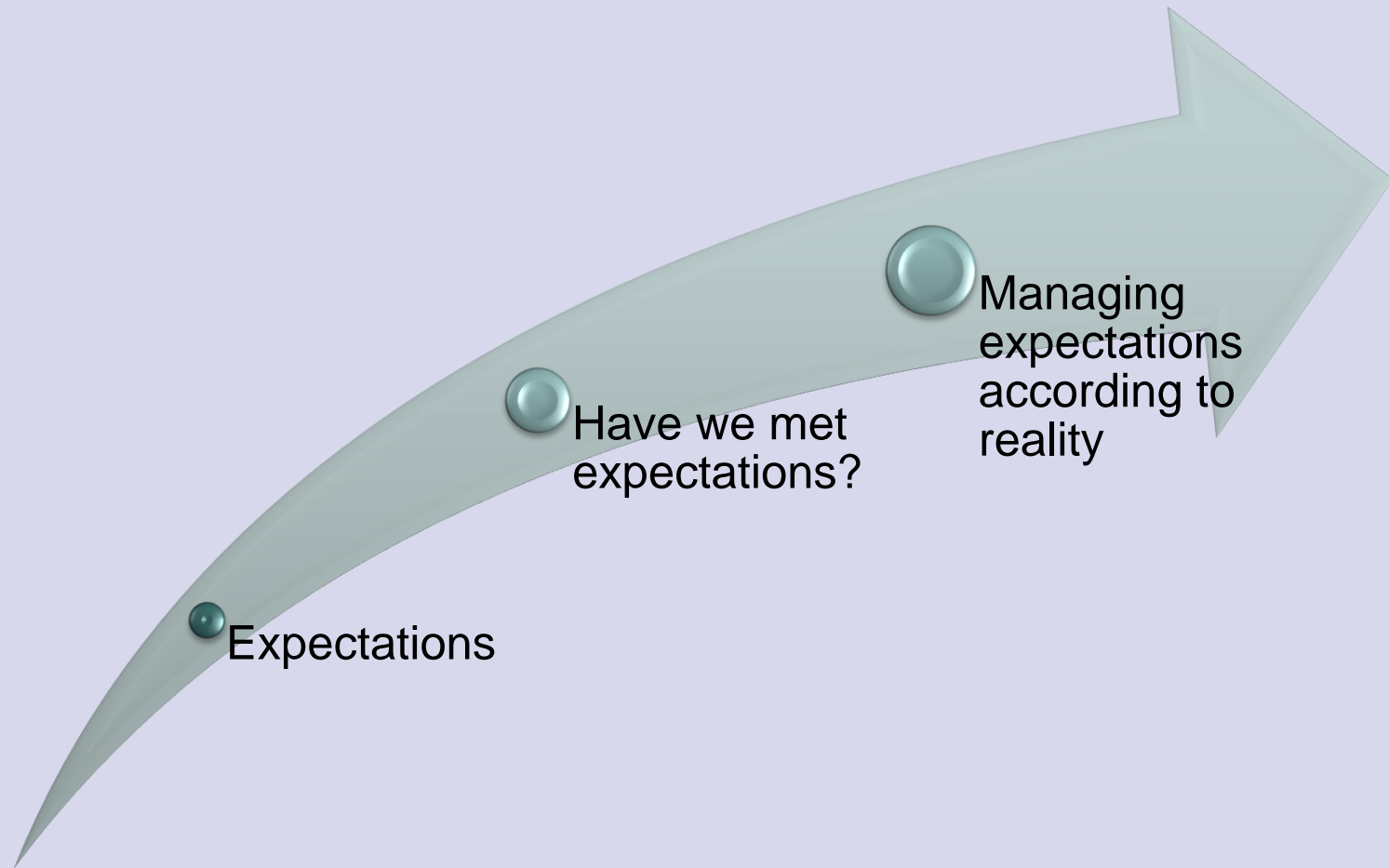
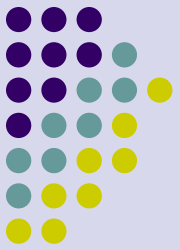


تناولت البحوث المواضيع التالية:

- *Producing Green Concrete Using Waste Plastic* (Suhad M Abd, Fahad Mohammad* Humam [11 (Ahdul-sattar and Mais Malallah
- *Effect of Using Corn Starch as Concrete Admixture* (Suhad M Abd*, Qassim Y Hamood Alaa S [21 (Khamees and Zainah H Ali
- *Effective Replacement of Fine Aggregates by Expanded Polystyrene Beads in Concrete* (Suhad M [21 (Abd, Dhamva Gh Maan Hattem* and Dunva Khalil
- *The Effect of Rubber Crumbs on Properties of Concrete* (Suhad M Ahda* Naham N Ahash [11 (Rowdah H Alic and Mustafa A Farhoodd

وقد حملت جميع البحوث اسم جامعة ديالى - كلية الهندسة - قسم الهندسة المدنية إزاء الباحثين وهي تعتبر اول تجربة بحثية للطلبة وأول تجربة في تطبيق تقنيات التعلم الحديثة بإشراك الطلبة عمليا بإنجاز بحث علمي تطبيقي في مادة الاختصاص ونشره عالميا لتحقيق عدة اهداف أهمها انجاز ممارسة تطبيقية لمادة منهجية البحث العلمي وتطبيق عملي لمادة تقنيات الخرسانة المتقدمة وتعزيز قدرات الطلبة ورفع مستوى الثقة الذاتية لديهم وتشجيع الطلبة باعتماد أسلوب الفرق العلمية والبحثية لحل القضايا والمشاكل العلمية بروحية الفريق الواحد.

Assessment and Evaluation



BE POSITIVE

