

جامـعة البحريــن - University of Bahrain QUALITY ASSURANCE & ACCREDITATION



مركــز ضمــان الجــودة والاعتمــاد الأكـاديمـ

	Course Syllabus Form				
1. College	Bahrain Teachers College				
2. Department	Mathematics and Science Education				
3. Program	Bachelor of Education				
4. Course Code	TC2MA324				
5. Course Title	History of Mathematics				
6. Course Credits	3				
7. Pre–requisites	TC2MA211: Arithmetic Topics				
8. Course Web–pages	http://www.btc.uob.edu.bh/moodle				
9. Class Time	Sundays and Wednesday 11:20 AM – 12:35 PM				
10. Classroom No.	S22-180				
11. Course Coordinator	Dr. Abdulla Eid				
12. Course Instructor	Dr. Abdulla Eid				
13. Instructor Office	S22-206				
14. Instructor Office Hours	Sundays and Wednesday 7:30 AM – 9:30 PM				
15. Academic Year	2014/2015				
16. Semester	Second				

17. Course Description: This course will allow the trainee teachers to explore the dynamic nature of Mathematics throughout history and its increasing role in social, cultural and economic development and its impact on the society. It will help the students to gain a rich understanding of the origin of mathematical concepts, chronological and topical development of Mathematics. It requires students to understand the contributions of historical figures, including individuals of various racial, ethnic, gender and national groups and their discoveries that affected the course of civilization. This will also help the teacher trainees to acquire confidence and specific teaching skills by incorporating new teaching skills through micro teaching.

18. Textbook:

• Victor J. Katz, *A History of mathematics: an introduction*, 2008, 3rd Edition, Pearson, ISBN-13: 978-0321387004.

19. References:

- 1. Jeff Suzuki, *A History of Mathematics*, 2002, 1st Edition, Prentice Hall, ISBN–13: 978-0130190741.
- 2. COMAP, For all Practical Purposes: Mathematical Literacy in Today's World, 2013, 9th Edition, W. H. Freeman, ISBN–13: 978-1429254823.

20. Other Resources:

- Moodle.
- Instructor's lecture Notes.

21. Course Intended Learning Outcomes (CILOs):										
Mapping				ng to	PIL	Os				
	CILOs			3	4	5	6	7	8	9
1	Explore the dynamic nature of mathe- matics throughout history and its increas- ingly significant role in social, cultural and economic development and develop a broader level of understanding of math- ematics	 ✓ 								
2	Describe the origins of mathematical con- cepts and document the history of math- ematics and a historical perspective re- garding the development of mathematics	~	~			√				
3	Discuss the contributions of historical fig- ures including individuals of various ori- gin	~		~		 ✓ 		~		
4	Explain the contributions of mathematics to the society and its impact on society	\checkmark		\checkmark						
5	EExposed to the mathematical discover- ies that have affected the course of civi- lization	~	~							
6	Accomplish specific teacher competencies by attaining confidence in teaching	\checkmark	\checkmark	\checkmark	\checkmark					✓
7	Incorporate new teaching skills under controlled conditions by microteaching	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
8	Acquire a number of teaching skills and incorporate history of the content	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark

Program Intended Learning Outcomes (PILOs – Teacher Competencies

- 1. Content Knowledge.
- 2. Student Development.
- 3. Diverse Learners.
- 4. Instructional Strategies.
- 5. Learning Environment.
- 6. Assessment.
- 7. Communication and Instructional Technology.
- 8. School and Community Engagement.
- 9. Reflective Practice, Ethics, and Professionalism.
- 22. Course Weekly Breakdown:

Week	Date	Topics Covered	CILOs	Teaching Method	Assessment
1	15.2.2015	Egyptian Mathematics	1-5	Lecture, Discus- sion and Analysis	Observation, Oral re- ports Brain Storming
2	22.2.2015	Babylonian Mathematics	1-5	Lecture, Analy- sis and Discussion	Observation, Oral re- ports and Brain Storming
3	1.3.2015	Greek Mathematics	1-5	Lecture, Analy- sis and Discussion	Observation, Oral re- ports and Brain Storming
4	8.3.2015	Chinese Mathematics	1-5	Lecture, Analy- sis and Discussion	Observation, Oral re- ports and Brain Storming
5	15.3.2015	Indian Mathematics	1-5	Lecture, Analy- sis and Discussion	Observation, Oral re- ports and Brain Storming

6	22.3.2015	Islamic Mathematics	1-5	Lecture, Analy- sis and Discussion	Observation, Oral re- ports and Brain Storming
7	29.3.2015	Islamic Mathematics	1 – 5	Lecture, Coop- erative Learn- ing and Discussion	Observation, Oral re- ports and Brain Storming
8	5.4.2015	Medieval Mathematics	1-5	Lecture, Coop- erative Learn- ing and Discussion	Midterm Exam
9	12.4.2015	20th Century Mathematics	1-5	Lecture, Coop- erative Learn- ing and Discussion	Observation, Oral re- ports and Brain Storming
10	19.4.2015	Applications of Mathematics	1 – 5	Lecture, Coop- erative Learn- ing and Discussion	Observation, Oral re- ports and Brain Storming
11	26.4.2015	Applications of Mathematics	1 – 5	Lecture, Coop- erative Learn- ing and Discussion	Observation, Oral re- ports and Brain Storming
12	3.5.2015	Applications of Mathematics	1 – 5	Lecture, Coop- erative Learn- ing and Discussion	Observation, Oral re- ports and Brain Storming

13	10.5.2015	Group Presentation	4,6,7,8	Presentation	Observation and Rubrics
14	17.5.2015	Group Presentation	4,6,7,8	Presentation	Observation and Rubrics
15	24.5.2015	Group Presentation	4,6,7,8	Presentation	Observation and Rubrics
16	31.5.2015	Group Presentation	4,6,7,8	Presentation	Observation and Rubrics

23. Instructional Approaches:							
Direct Instruction			40% Small		all Group Discussion 10%		
Small Group Projects			20 %	% Ind	ependent Assignment 15 %		
Whole Class Discussion			10%	6 Oth	ner 0%		
24. 0	Course Assessment:						
No	Assessment	CIL	Os	Weigh	t Type Due Dates		
1	Quizzes	1-7 15%		15%	Written Quizzes TBA		
2	Midterm Exam 1	1-5 2		20%	Written Exam April 1, 2015		
3	Midterm Exam 2	2-7 2		25%	Written Exam May 13, 2015		
4	Research on Renaissance Mathematics	1-5 20%		20%	Group Project 2.5.2015		
5	Presentation	1-	- 9	10%	Pair Assignment TBA		
6	Participation	1-9		5%			
7	e-portfolio	1 -	- 9	5%	Reflection Report 28.5.2015		
			1				

25. Classroom and Academic Policies:

Attendance and Participation

You must attend the class regularly and on time. In the event that you miss a class, you are responsible for the material covered, including assignments, announcements, handouts, etc, and for any required preparation for the following class. Tardiness is unacceptable and every 3 instances of tardiness (defined as being 5-10 minutes late) will count as one full unexcused absence. If you are more than 10 minutes late to class, you will be considered absent for that day. An absence will be excused only with a medical note. For non-medical emergencies, discuss your need with the instructor before you are absent. BTC students are supported by MOE. Failure to attend classes will be reported and may result in changes in the support offered. Refer to Student Handbook for more information on the BTC attendance policies. Participation is an important aspect of this course. Participation is defined as full involvement in all class activities, including discussion, group work, workshops, student-instructor conferences, etc. Failure to participate will affect both your participation grade and your grade for particular assignments.

Cellphones

All cell phones must be switched off or on silent and out of sight during class time. You will be asked to leave if you disrupt class or teacher candidates with a ringing phone. Text messaging is NOT acceptable. As soon as the classroom door closes to start the class, all cell phones should be put away. This means cell phones should not be on top of your desks, in your hands, or visible to the class.

Missed Assignments

Assignments submitted late may be subject to an assessment penalty as established by the instructor of the course. Assignments missed as a result of absence that is not formally excused will not be graded; final grades will be calculated using the score of zero for such work.

Plagiarism

Using or closely imitating the language and thought of another author without authorization and the representation of that authors work as ones own, as by not crediting the original author is considered plagiarism. Self-plagiarism is dishonest and accepted as a form of plagiarism as well. It is not acceptable for a student to submit an assignment, in which some or all of that paper/work/text has already been submitted for another course or instructor. Students who plagiarize will be dealt with according to the rules and disciplinary measures in place for plagiarism including and up to expulsion from the BTC and the University of Bahrain. Disciplinary actions will remain as a part of students permanent records. Refer to BTC Student Handbook for more information on the BTC policy with regard to academic honesty and professional behavior.

Please refer to the Student Handbook for more information related to policies and procedures

26. Grades							
Letter Grade	Percentage Equivalent	Grade Point Value					
А	90 - 100	4.00					
A-	87 – 89	3.67					
B+	84 - 86	3.33					
В	80 - 83	3.00					
В-	77 – 79	2.67					
C+	74 - 76	2.33					
С	70 – 73	2.00					
C-	67 – 69	1.67					
D+	64 - 66	1.33					
D	60 - 63	1.00					
F	Below 60	0.00					
27. Rubrics							
Will be provided separately.							