

Profile information current as at 28/04/2024 05:41 pm

All details in this unit profile for BLAR11032 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit will introduce you to basic systems and calculations in structural design and stability for residential and commercial buildings.

Details

Career Level: Undergraduate Unit Level: Level 1 Credit Points: 6 Student Contribution Band: 8 Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

BLAR11049 Built Environment Communication and Skills Or COMM11003 Professional and Technical Communication (before 2012 term 1)

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

Offerings For Term 1 - 2021

Online

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

<u>Metropolitan Campuses</u> Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

Written Assessment
Weighting: 5%
Written Assessment
Weighting: 20%
Written Assessment
Weighting: 5%
Written Assessment
Weighting: 30%
Written Assessment
Weighting: 5%
Written Assessment
Weighting: 5%
Written Assessment
Weighting: 5%
Written Assessment

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the <u>CQUniversity Policy site</u>.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Moodle Unit Evaluation

Feedback

The unit content was to the point and understood. The Zoom sessions were very helpful in its entirety.

Recommendation

Good to know that the content and resources were useful towards learning progress and knowledge development.

Feedback from Moodle Unit Evaluation

Feedback

Lecturer provided additional explanation of subject matter as required to assist understanding.

Recommendation

Thanks for the feedback. Nice to see Lecturer helped the student/s to his/her level best.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

- 1. Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Calculate the properties of sections including first and second moment of area, structural determinacy and indeterminacy, bending and shear forces, bending moments, shear and bending stresses, deflections in beams, axial forces in trusses and column stresses, capacity and buckling
- 3. Apply the principles of structural analysis to determinate and indeterminate structures including the design of beams and columns and the bracing of rigid and pin jointed frames
- 4. Use basic computational methods to solve structural problems associated with residential and commercial buildings.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

N/A	Introductory	Intermediate	•	Graduate	_	Professional	_	Advanced	
Level	Level	Level		Level		Level		Level	

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4		
1 - Written Assessment - 5%	•	•				
2 - Written Assessment - 20%	•	•		•		
3 - Written Assessment - 5%	•		•			
4 - Written Assessment - 30%	•	•	•	•		
5 - Written Assessment - 5%	•		•			

Assessment Tasks	Learning Outcomes						
	1	2	3	4			
6 - Written Assessment - 35%	•	•	•	•			

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes Learning Outcome				
	1	2	3	4
1 - Communication	•	•	•	•
2 - Problem Solving	•	•	•	•
3 - Critical Thinking	•	•	•	•
4 - Information Literacy	•	•	•	
5 - Team Work				
6 - Information Technology Competence	•	•		•
7 - Cross Cultural Competence				
8 - Ethical practice		•		•
9 - Social Innovation		•		
10 - Aboriginal and Torres Strait Islander Cultures				

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 5%		•	•	•		•		•		
2 - Written Assessment - 20%	•	•	•	•		•		•	•	
3 - Written Assessment - 5%		•	•	•		•		•		
4 - Written Assessment - 30%	•	•	•	•		•		•	•	
5 - Written Assessment - 5%	•	•	•	•		•		•		
6 - Written Assessment - 35%	•	•	•	•		•		•	•	

Textbooks and Resources

Textbooks

BLAR11032

Prescribed

Principles Of Structure

Edition: 5th (2013) Authors: Wyatt, KJ & Hough, R Newsouth Books Sydney , NSW , Australia ISBN: 1742232930 Binding: Hardcover

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Computer headset (microphone speaker combo)
- Microsoft Office or equivalent software
- Web camera (webcam)

Referencing Style

All submissions for this unit must use the referencing style: <u>Harvard (author-date)</u> For further information, see the Assessment Tasks.

Teaching Contacts

Peter F Lawrence (Engineering) Unit Coordinator p.lawrence1@cqu.edu.au

Schedule

Week 1 - 08 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic
1:Equilibrium and building structures	Wyatt & Hough (2013) chapter 1, 4	
Week 2 - 15 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic
2:Load and load paths, support conditions	Wyatt & Hough (2013) chapter 1, 3	Assessment 1 - Short Written Response Due: Week 2 Friday (19 Mar 2021) 11:45 pm AEST
Week 3 - 22 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic
3:Determinacy, indeterminacy and instability	Wyatt & Hough (2013) chapter 1	
Week 4 - 29 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic

4:Section properties	Wyatt & Hough (2013) chapter 1, 2, 8	Assessment 2 - Written Assessment Due: Week 4 Thursday (1 Apr 2021) 11:45 pm AEST			
Week 5 - 05 Apr 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
5:Analysis of statically determinate trusses	Wyatt & Hough (2013) chapter 2, 5				
Vacation Week - 12 Apr 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
No scheduled class	Consider using this week to catch-up or work on an assessment.				
Week 6 - 19 Apr 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
6:Beams shear force and bending moment	Wyatt & Hough (2013) chapter 7	Assessment 3 - Short Written Response Due: Week 6 Friday (23 Apr 2021) 11:45 pm AEST			
Week 7 - 26 Apr 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
7.Bending and shear stresses	Wyatt & Hough (2013) chapter 9, 10				
Week 8 - 03 May 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
8:Compression and tension stresses	Wyatt & Hough (2013) chapter 2	Assessment 4 - Written Assessment Due: Week 8 Friday (7 May 2021) 11:45 pm AEST			
Week 9 - 10 May 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
9:Deflections	Wyatt & Hough (2013) chapter 11				
Week 10 - 17 May 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
10:Design of beams	Wyatt & Hough (2013) chapter 12	Assessment 5 - Short Written Response Due: Week 10 Friday (21 May 2021) 11:45 pm AEST			
Week 11 - 24 May 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
11:Bracing of buildings	Wyatt & Hough (2013) chapter 6				
Week 12 - 31 May 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
12:Computer applications in structural analysis and design	Please refer to the Moodle unit site for additional information.				
Review/Exam Week - 07 Jun 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
Review		Assessment 6 - Written Assessment Due: Review/Exam Week Friday (11 June 2021) 11:45 pm AEST			
Exam Week - 14 Jun 2021					
Module/Topic	Chapter	Events and Submissions/Topic			
There is no exam for this unit.					

1 Assessment 1 - Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 and 2. Assessment A1 will require you to research and answer a question that explores common structural engineering concepts.

Assessment Due Date

Week 2 Friday (19 Mar 2021) 11:45 pm AEST

Return Date to Students

Week 4 Wednesday (31 Mar 2021)

Weighting

5%

Minimum mark or grade

Aggregate mark for A1+A3+A5 to be 7.5/15 or higher

Assessment Criteria

This assessment relates to learning outcomes 1 and 2. Assessment 1 will require you to research and answer a question that explores common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Calculate the properties of sections including first and second moment of area, structural determinacy and indeterminacy, bending and shear forces, bending moments, shear and bending stresses, deflections in beams, axial forces in trusses and column stresses, capacity and buckling

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

• Ethical practice

2 Assessment 2 - Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 and 2. Assessment 2 will require you to research and answer a number of questions that explore common structural engineering concepts.

Assessment Due Date

Week 4 Thursday (1 Apr 2021) 11:45 pm AEST

Return Date to Students

Week 6 Thursday (22 Apr 2021)

Weighting

20%

Assessment Criteria

This assessment relates to learning outcomes 1 and 2. Assessment 2 will require you to research and answer a number of questions that explore common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Calculate the properties of sections including first and second moment of area, structural determinacy and indeterminacy, bending and shear forces, bending moments, shear and bending stresses, deflections in beams, axial forces in trusses and column stresses, capacity and buckling
- Use basic computational methods to solve structural problems associated with residential and commercial buildings.

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

Social Innovation

3 Assessment 3 - Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 and 3. Assessment 3 will require you to research and answer a question that explores common structural engineering concepts.

Assessment Due Date

Week 6 Friday (23 Apr 2021) 11:45 pm AEST

Return Date to Students

Week 8 Thursday (6 May 2021)

Weighting

5%

Minimum mark or grade

Aggregate mark for A1+A3+A5 to be 7.5/15 or higher

Assessment Criteria

This assessment relates to learning outcomes 1 and 3. Assessment 3 will require you to research and answer a question that explores common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Apply the principles of structural analysis to determinate and indeterminate structures including the design of beams and columns and the bracing of rigid and pin jointed frames

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

4 Assessment 4 - Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 to 4. Assessment 4 will require you to research and answer a number of questions that explore common structural engineering concepts.

Assessment Due Date

Week 8 Friday (7 May 2021) 11:45 pm AEST

Return Date to Students

Week 10 Thursday (20 May 2021)

Weighting

30%

Assessment Criteria

This assessment relates to learning outcomes 1 to 4. Assessment 4 will require you to research and answer a number of questions that explore common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Calculate the properties of sections including first and second moment of area, structural determinacy and indeterminacy, bending and shear forces, bending moments, shear and bending stresses, deflections in beams, axial forces in trusses and column stresses, capacity and buckling
- Apply the principles of structural analysis to determinate and indeterminate structures including the design of beams and columns and the bracing of rigid and pin jointed frames
- Use basic computational methods to solve structural problems associated with residential and commercial buildings.

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

- Ethical practice
- Social Innovation

5 Assessment 5 - Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 and 3. Assessment 5 will require you to research and answer a question that explores common structural engineering concepts.

Assessment Due Date

Week 10 Friday (21 May 2021) 11:45 pm AEST

Return Date to Students

Week 12 Thursday (3 June 2021)

Weighting

5%

Minimum mark or grade

Aggregate mark for A1+A3+A5 to be 7.5/15 or higher

Assessment Criteria

This assessment relates to learning outcomes 1 and 3. Assessment 5 will require you to research and answer a question that explores common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Apply the principles of structural analysis to determinate and indeterminate structures including the design of beams and columns and the bracing of rigid and pin jointed frames

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

• Ethical practice

6 Assessment 6 - Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment relates to learning outcomes 1 to 4. Assessment 6 will require you to research and answer a number of questions that explore common structural engineering concepts.

Assessment Due Date

Review/Exam Week Friday (11 June 2021) 11:45 pm AEST

Return Date to Students

Wednesday 30/06/21

Weighting 35%

Minimum mark or grade 14/35

Assessment Criteria

This assessment relates to learning outcomes 1 to 4. Assessment 6 will require you to research and answer a number of questions that explore common structural engineering concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your assessment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

Submission file is lodged through the assessment link in Moodle, by following the on-screen instructions. Work will be processed through the similarity detection software, Turnitin.

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assessment on the unit Moodle site.

The assessment will be assessed on the following basis:

Clarity of expression and comprehensive coverage of issues

Use of quality supporting documentation as appropriate

Use of original thought and content

Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.

Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit as a single PDF or DOCX file into the Moodle Assessment portal.

Learning Outcomes Assessed

- Explain the concept of equilibrium, determine loading and load paths in building structures and calculate supporting reactions
- Calculate the properties of sections including first and second moment of area, structural determinacy and indeterminacy, bending and shear forces, bending moments, shear and bending stresses, deflections in beams, axial forces in trusses and column stresses, capacity and buckling
- Apply the principles of structural analysis to determinate and indeterminate structures including the design of beams and columns and the bracing of rigid and pin jointed frames
- Use basic computational methods to solve structural problems associated with residential and commercial buildings.

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice
- Social Innovation

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic** Integrity Policy and Procedure. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem