**CHE 1101 - Introduction to Chemical Engineering 1**

Course Overview and Course Evaluation Summary - [abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - p. 1-16

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 2 [Syllabus for Students](https://fit.instructure.com/files/43525329/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43840703/download?download_frd=1) - p. 3 [List of Course Outcomes](https://fit.instructure.com/files/43817333/download?download_frd=1) – pp. 1-2

[Entire Course Content](https://fit.instructure.com/files/43509619/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 1 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 1

All homework assignments, unless otherwise noted, are in [che1101hwf20.doc](https://fit.instructure.com/files/43525331/download?download_frd=1), although additional documentation for many of the problems is also in [che1101syllabusplusallhomework.pdf](https://fit.instructure.com/files/43517331/download?download_frd=1)

Note that some assignments (8 and 9) have grades of 0 or 100, depending on whether they are done

Homework # Assignment .Zip Files with Best/Average/Poor Examples

1 No data collected (done or not done)

2 [hw2simpler.xls](https://fit.instructure.com/files/43517335/download?download_frd=1) [CHE1101hw2ABETbestavgpoor.zip](https://fit.instructure.com/files/43509255/download?download_frd=1)

[pvcqandi.pdf](https://fit.instructure.com/files/43525337/download?download_frd=1)

3 [CHE1101hw3ABETbestavgpoor.zip](https://fit.instructure.com/files/43509259/download?download_frd=1)

4 [CHE1101hw4ABETbestavgpoor.zip](https://fit.instructure.com/files/43509261/download?download_frd=1)

5 [CHE1101hw5ABETbestavgpoor.zip](https://fit.instructure.com/files/43509263/download?download_frd=1)

6 [CHE1101hw6ABETbestavgpoor.zip](https://fit.instructure.com/files/43509257/download?download_frd=1)

7 [CHE1101hw7ABETbestavgpoor.zip](https://fit.instructure.com/files/43509265/download?download_frd=1)

8 Project Selection No data collected (done or not done)

9 [Intro to CAD](https://fit.instructure.com/files/43525339/download?download_frd=1) No data collected (done or not done)

10 Group Project Flight Check Better summarized as part of presentation

Exam 1 [exam1partialanswer.pdf](https://fit.instructure.com/files/43509247/download?download_frd=1) [CHE1101exam1ABETbestavgpoor.zip](https://fit.instructure.com/files/43509249/download?download_frd=1)

[examanswers.pdf](https://fit.instructure.com/files/43525335/download?download_frd=1)

Project Presentation Presentation [CHE1101finalpresentations1.mp4](https://fit.instructure.com/files/43179635/download?download_frd=1)

[TALK.ppt](https://fit.instructure.com/files/43815129/download?download_frd=1) [CHE1101finalpresentations2.mp4](https://fit.instructure.com/files/43517753/download?download_frd=1)

[che1101evaldesign2016.xls](https://fit.instructure.com/files/43815125/download?download_frd=1) [CHE1101finalpresentationsABETbestavgpoor.zip](https://fit.instructure.com/files/43509251/download?download_frd=1)

Project Reports Final Report [CHE1101finalreportsABETbestavgpoor.zip](https://fit.instructure.com/files/43509253/download?download_frd=1)

[reportexpectations.txt](https://fit.instructure.com/files/43815127/download?download_frd=1) Reports are typically revised until all students in a

group have maximized their course grade

The [.zip file](https://fit.instructure.com/files/43815133/download?download_frd=1) contains final versions of reports

Professor Reflections

Homeworks: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 [abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - pp. 4-12

Exam 1 [abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - p. 13

Project Presentation [abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - pp. 14-15

Project Reports [abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - p. 16

Comparison of Student Performance to Desired Course Outcomes in

[abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - p. 2

Comparison of Student Performance to Desired Program Outcomes in

[abetche1101evaluation2021.doc](https://fit.instructure.com/files/43840705/download?download_frd=1) - p. 3

**CHE 1102 - Introduction to Chemical Engineering 2**

Course Overview and Course Evaluation Summary - [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - pp. 1-16

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 4 [Syllabus for Students](https://fit.instructure.com/files/43524597/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43840711/download?download_frd=1) - p. 5 [List of Course Outcomes](https://fit.instructure.com/files/43817333/download?download_frd=1) – pp. 3-4

[Entire Course Content](https://fit.instructure.com/files/43509479/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 2 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 2

Most lecture content is in [coursepacks12.pptx](https://fit.instructure.com/files/43824725/download?download_frd=1).

All homework problems are in [CHE1102hws21.doc](https://fit.instructure.com/files/43524589/download?download_frd=1).

Homework # Answers .Zip Files with Best/Average/Poor Examples

1 [week1.zip](https://fit.instructure.com/files/43526699/download?download_frd=1) [CHE1102hw1ABETbestavgpoor.zip](https://fit.instructure.com/files/43526391/download?download_frd=1)

2 [week2.pdf](https://fit.instructure.com/files/43526683/download?download_frd=1) [CHE1102hw2ABETbestavgpoor.zip](https://fit.instructure.com/files/43526393/download?download_frd=1)

3 [week3.zip](https://fit.instructure.com/files/43526701/download?download_frd=1) [hw3.zip](https://fit.instructure.com/files/43832013/download?download_frd=1)

4 [week4.zip](https://fit.instructure.com/files/43526703/download?download_frd=1) [hw4.zip](https://fit.instructure.com/files/43823743/download?download_frd=1)

5 [week5.zip](https://fit.instructure.com/files/43526705/download?download_frd=1) [hw5.zip](https://fit.instructure.com/files/43823745/download?download_frd=1)

6 & 7 [sphericaltankdepth.xls](https://fit.instructure.com/files/43526445/download?download_frd=1) [hw6and7.zip](https://fit.instructure.com/files/43823747/download?download_frd=1)

[watergasshiftequilibrium.xls](https://fit.instructure.com/files/43526451/download?download_frd=1)

[watergasshift.pol](https://fit.instructure.com/files/43526449/download?download_frd=1)

8 in [week9.zip](https://fit.instructure.com/files/43526711/download?download_frd=1) [hw8.zip](https://fit.instructure.com/files/43823749/download?download_frd=1)

9 [fallingparticle.xls](https://fit.instructure.com/files/43526437/download?download_frd=1) done or not done

10 [numericintegrationtrapezoidalrule.xls](https://fit.instructure.com/files/43526435/download?download_frd=1) done or not done

11 [labviewHWinstructions.rtf](https://fit.instructure.com/files/43824715/download?download_frd=1) [LabViewHW11.zip](https://fit.instructure.com/files/43824713/download?download_frd=1)

Student Work

Exam 1 ["Take Home Excel Part"](https://fit.instructure.com/files/43514789/download?download_frd=1) ["Take Home Word Part"](https://fit.instructure.com/files/43514791/download?download_frd=1) [exam1.zip](https://fit.instructure.com/files/43823737/download?download_frd=1)

["In Class Excel Part"](https://fit.instructure.com/files/43515843/download?download_frd=1) ["In Class Word Part"](https://fit.instructure.com/files/43515841/download?download_frd=1) [exam2.zip](https://fit.instructure.com/files/43823739/download?download_frd=1)

Exam 2 ["Take Home"](https://fit.instructure.com/files/43515739/download?download_frd=1) [exam2.zip](https://fit.instructure.com/files/43823739/download?download_frd=1)

["In Class Word Part"](https://fit.instructure.com/files/43515733/download?download_frd=1) ["In Class Excel Part"](https://fit.instructure.com/files/43515735/download?download_frd=1) [exam2.zip](https://fit.instructure.com/files/43823739/download?download_frd=1)

Final Exam ["Word Part"](https://fit.instructure.com/files/43515731/download?download_frd=1) [final.zip](https://fit.instructure.com/files/43823741/download?download_frd=1)

["Excel Part"](https://fit.instructure.com/files/43515737/download?download_frd=1)

Professor Reflections

Homeworks: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - pp. 4-13

Exam 1 Take Home [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 14

Exam 1 In Class [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 14

Exam 2 Take Home [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 15

Exam 2 In Class [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 15

Final Exam Take Home [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 16

Final Exam In Class [abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 16

Comparison of Student Performance to Desired Course Outcomes in

[abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 2

Comparison of Student Performance to Desired Program Outcomes in

[abetche1102evaluation2021.doc](https://fit.instructure.com/files/43840709/download?download_frd=1) - p. 3

**CHE 3260 - Materials Science and Engineering**

Course Overview & Course Evaluation Summary - [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) pp. 1-5

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 6 [Syllabus for Students](https://fit.instructure.com/files/43524581/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43843917/download?download_frd=1) - p. 7 [List of Course Outcomes](https://fit.instructure.com/files/43817333/download?download_frd=1) – pp. 5-6

[Entire Course Content](https://fit.instructure.com/files/43509685/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 4 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 4

Homeworks 7 and 8 is a group assignment that is also used for evaluation of multidisciplinary teamwork and of ABET's non-technical outcomes.

Homework # Assignment .Zip Files with Best/Average/Poor Examples

1 [hw1che3260.pdf](https://fit.instructure.com/files/43504717/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

2 [hw2che3260.pdf](https://fit.instructure.com/files/43504721/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

3 [hw3che3260.pdf](https://fit.instructure.com/files/43504699/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

4 [hw4che3260.pdf](https://fit.instructure.com/files/43504723/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

5 [hw5che3260.pdf](https://fit.instructure.com/files/43504725/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

6 [hw6che3260.pdf](https://fit.instructure.com/files/43504727/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

7 & 8 [hw7and8che3260.pdf](https://fit.instructure.com/files/43504701/download?download_frd=1) [abetreadyCHE3260HW1-8.zip](https://fit.instructure.com/files/43822531/download?download_frd=1)

Exam 1 [che3260exam1f20.pdf](https://fit.instructure.com/files/43504703/download?download_frd=1) [CHE3260exam1ABETbestavgpoor.zip](https://fit.instructure.com/files/43504705/download?download_frd=1)

Exam 2 [che3260exam1f20.pdf](https://fit.instructure.com/files/43504713/download?download_frd=1) [CHE3260exam2ABETbestavgpoor.zip](https://fit.instructure.com/files/43504707/download?download_frd=1)

Exam 3 [che3260exam1f20.pdf](https://fit.instructure.com/files/43504715/download?download_frd=1) [CHE3260exam3ABETbestavgpoor.zip](https://fit.instructure.com/files/43504709/download?download_frd=1)

Final Exam [che3260finalexamf20.pdf](https://fit.instructure.com/files/43504719/download?download_frd=1) [CHE3260finalexamABETbestavgpoor.zip](https://fit.instructure.com/files/43504711/download?download_frd=1)

Professor Reflections

Homeworks: 1, 2, 3, 4, 5, 6, 7, 8 [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) pp. 6-13

Exam 1 [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 14

Exam 2 [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 15

Exam 3 [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 16

Final Exam [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 17

Comparison of Student Performance to Desired Course Outcomes

[abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 18

Comparison of Student Performance to Desired Program Outcomes broken down as follows:

All Program Outcomes: [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 19

Multidisciplinary Teamwork: [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 20

Non-Technical ABET Outcomes: [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 25

Discipline-Specific Science/Engineering [abetche3260evaluation20202021.doc](https://fit.instructure.com/files/43843915/download?download_frd=1) p. 28

**CHE 4288/5288 - Petroleum Processing**

Course Overview and Course Evaluation Summary

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 8 Syllabus for Students

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 9 List of Course Outcomes

Entire Course Content - [Part 1](https://fit.instructure.com/files/43509679/download?download_frd=1) and [Part 2](https://fit.instructure.com/files/43509681/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 8 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 8

Homework # Assignment .Zip Files with Best/Average/Poor Examples

1 CHE4288hw1ABETbestavgpoor.zip

2 CHE4288hw2ABETbestavgpoor.zip

3 CHE4288hw3ABETbestavgpoor.zip

4 CHE4288hw4ABETbestavgpoor.zip

5 CHE4288hw5ABETbestavgpoor.zip

6 CHE4288hw6ABETbestavgpoor.zip

Exam 1 CHE4288Exam1ABETbestavgpoor.zip

Exam 2 CHE4288Exam2ABETbestavgpoor.zip

Exam 3 CHE4288Exam3ABETbestavgpoor.zip

Final Exam CHE4288FinalExambestavgpoor.zip

Professor Reflections

Homeworks: 1, 2, 3, 4, 5, 6 CHE4288HomeworkReflections.docx

Exam 1 CHE4288Exam1Reflection.docx

Exam 2 CHE4288Exam2Reflection.docx

Final Exam CHE4288FinalExamReflection.docx

CHE4288\_Comparison\_of\_Student\_Performance\_to\_Desired\_Learning\_Course\_Outcomes.docx

CHE4288\_Comparison\_of\_Student\_Performance\_to\_Desired\_Program\_Outcomes.docx

**CHE 5252 - Catalytic Reactor Design (also listed under CHE 4591 - Special Topics in ChE)**

Course Overview and Course Evaluation Summary

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - pp. 23-24 Syllabus for Students

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 25 List of Course Outcomes

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 9 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 9

Homework # Assignment .Zip Files with Best/Average/Poor Examples

1 CHE5252hw1ABETbestavgpoor.zip

2 CHE5252hw2ABETbestavgpoor.zip

3 CHE5252hw3ABETbestavgpoor.zip

4 CHE5252hw4ABETbestavgpoor.zip

5 CHE5252hw5ABETbestavgpoor.zip

6 CHE5252hw6ABETbestavgpoor.zip

Exam 1 CHE5252Exam1ABETbestavgpoor.zip

Exam 2 CHE5252Exam2ABETbestavgpoor.zip

Final Exam CHE5252FinalExambestavgpoor.zip

Professor Reflections

Homeworks: 1, 2, 3, 4, 5, 6 CHE5252HomeworkReflections.docx

Exam 1 CHE5252Exam1Reflection.docx

Exam 2 CHE5252Exam2Reflection.docx

Final Exam CHE5252FinalExamReflection.docx

CHE5252\_Comparison\_of\_Student\_Performance\_to\_Desired\_Learning\_Course\_Outcomes.docx

CHE5252\_Comparison\_of\_Student\_Performance\_to\_Desired\_Program\_Outcomes.docx

**CHE 4568 - The Basics of Making** (also listed under CHE 4591 & 5291 - Special Topics in ChE

and BME 4050 & 5790 - Special Topics in BME)

[Course Overview and Course Evaluation Summary](https://fit.instructure.com/files/43840721/download?download_frd=1) - pp. 7 to end

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - pp. 16-19 [Syllabus for Students](https://fit.instructure.com/files/43517155/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43840713/download?download_frd=1) - pp. 20-21 [List of Course Outcomes](https://fit.instructure.com/files/43815139/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 7 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 7

[In Class Participation Grades](https://fit.instructure.com/courses/551142/assignments/) (These are assessed on a pass/fail basis regarding whether the

student was able to execute the experiment.)

[Wiring Light Bulb Circuit](https://fit.instructure.com/courses/551142/assignments/4718023) [LabView - Conversion of C to F](https://fit.instructure.com/courses/551142/assignments/4718021)

[Arduino Blink](https://fit.instructure.com/courses/551142/assignments/4718025) [Soldering of Load Cell to Load Cell Shield](https://fit.instructure.com/courses/551142/assignments/4718027)

[Temperature Sensor Lab](https://fit.instructure.com/courses/551142/assignments/4718029) [Load Cell Sensor - Arduino](https://fit.instructure.com/courses/551142/assignments/4718031)

[pH Sensor](https://fit.instructure.com/courses/551142/assignments/4718033) [Electrical Conductivity / Salinity Sensor - Arduino](https://fit.instructure.com/courses/551142/assignments/4718035)

[Python Programming](https://fit.instructure.com/courses/551142/assignments/4718049) [Servo Motor - Arduino](https://fit.instructure.com/courses/551142/assignments/4718041)

[Stepper Motor and DC Motor - Arduino](https://fit.instructure.com/courses/551142/assignments/4718039) [Arduino & Bluetooth Robot Control](https://fit.instructure.com/courses/551142/assignments/4718045)

[3D Printer Configuration and Subsystems](https://fit.instructure.com/courses/551142/assignments/4724861) [CAD Drawing](https://fit.instructure.com/courses/551142/assignments/4718051)

[Microfluidic Flow & Lab-on-a-Chip](https://fit.instructure.com/courses/551142/assignments/4718047) [SpeakerBox - Soldering of LED's](https://fit.instructure.com/courses/551142/assignments/4718473)

[Editing of .stl Files with Meshmixer/Inkscape](https://fit.instructure.com/courses/551142/assignments/4718465)

[Conversion of CAD --> .stl](https://fit.instructure.com/courses/551142/assignments/4718463) [3D Printing](https://fit.instructure.com/courses/551142/assignments/4718467)

[SpeakerBox Construction & Wiring](https://fit.instructure.com/courses/551142/assignments/4718469) [Bluetooth Arduino SpeakerBox Configuration](https://fit.instructure.com/courses/551142/assignments/4718475)

[Laser Cutting of SpeakerBox Top](https://fit.instructure.com/courses/551142/assignments/4718471) [Electrochemical Concentration Monitoring](https://fit.instructure.com/courses/551142/assignments/4718043)

[Electrical Conductivity Calibration](https://fit.instructure.com/courses/551142/assignments/4718479)

[HW 1 - Kit Identification](https://fit.instructure.com/courses/551142/assignments/4713623) CHE4568hw1ABETbestavgpoor.zip

[HW 2 - Questions and Issues Sheet for Project](https://fit.instructure.com/courses/551142/assignments/4715741) see [thebasicsofmaking.htm](https://fit.instructure.com/files/43831953/download?download_frd=1)

[HW 3 - LabView Programming](https://fit.instructure.com/courses/551142/assignments/4718491) [hw3labview.zip](https://fit.instructure.com/files/43824693/download?download_frd=1)

[HW 4 - Python Programming](https://fit.instructure.com/courses/551142/assignments/4718499) done or not done

[HW 5 - CAD Drawing](https://fit.instructure.com/courses/551142/assignments/4718493) see [thebasicsofmaking.htm](https://fit.instructure.com/files/43831953/download?download_frd=1)

[HW 6 - Meshmixer Prep](https://fit.instructure.com/courses/551142/assignments/4719011) done or not done

[HW 7 - Data Acquisition, Mass & Energy Balance](https://fit.instructure.com/courses/551142/assignments/4718497) [hw7.zip](https://fit.instructure.com/files/43831871/download?download_frd=1)

Closure, Process Control, & Hazardous

Operability (HAZOP) Analysis

Lab Report

[CAD Drawing, 3D Printing, Fit & Finish](https://fit.instructure.com/courses/551142/assignments/4718495) see [thebasicsofmaking.htm](https://fit.instructure.com/files/43831953/download?download_frd=1)

Quizzes

[Quiz 1 - pH, Data Acquisition, and Acid/Base Titration](https://fit.instructure.com/courses/551142/assignments/4718489) CHE4568quiz1bestavgpoor.zip

[Quiz 2 - CAD Drawing](https://fit.instructure.com/courses/551142/assignments/4718485) CHE4568quiz2bestavgpoor.zip

Final Project Rubric for End-of-Semester Project ([multiple worksheets in Excel file](https://fit.instructure.com/files/43517417/download?download_frd=1))

Project Posters are linked in [thebasicsofmaking.htm](https://fit.instructure.com/files/43831953/download?download_frd=1)

Project Final Reports are linked in [thebasicsofmaking.htm](https://fit.instructure.com/files/43831953/download?download_frd=1)

End of Semester Project Performance & Complexity [CHE4568projectrubric.xlsx](https://fit.instructure.com/files/43517417/download?download_frd=1)

End of Semester Poster Presentation [CHE4568projectrubric.xlsx](https://fit.instructure.com/files/43517417/download?download_frd=1)

Final Project Report - Literature Review & Business Case [CHE4568projectrubric.xlsx](https://fit.instructure.com/files/43517417/download?download_frd=1)

Final Project Report [CHE4568projectrubric.xlsx](https://fit.instructure.com/files/43517417/download?download_frd=1)

Professor Reflections

In Class Assignments [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 14

Homeworks and Quizzes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 15

End of Semester Project Performance &

Complexity [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 16

End of Semester Poster Presentation [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 16

Literature Review & Business Case [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 16

Final Project Report [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 16

Comparison of Student Performance to Desired Course Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 17

Comparison of Student Performance to Desired Program Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 18

**CHE 4567 - Nanotechnology** (also listed under CHE 5567 and BME 4050 & 5790 -

Special Topics in BME)

[Course Overview and Course Evaluation Summary](https://fit.instructure.com/files/43840721/download?download_frd=1) - pp. 1-5

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - pp. 12-13 [Syllabus for Students](https://fit.instructure.com/files/43528459/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43819845/download?download_frd=1) - pp. 14-15 [List of Course Outcomes](https://fit.instructure.com/files/43817337/download?download_frd=1) – pp. 8-11

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 6 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 6

All homework questions are in [readdiscusstopicsall2007g.doc](https://fit.instructure.com/files/43820451/download?download_frd=1)

The homework answers are circled or bracketed in the news items, so there is no point in looking through best, average, and poor examples. Almost all students get 100's on the homeworks, and almost all get > 90.

Homework # .Zip Files with Homework Examples

1, 2, 3 [CHE4567hw1.zip](https://fit.instructure.com/files/43817535/download?download_frd=1), [CHE4567hw2.zip](https://fit.instructure.com/files/43817537/download?download_frd=1), [CHE4567hw3.zip](https://fit.instructure.com/files/43817539/download?download_frd=1)

4, 5, 6 [CHE4567hw4.zip](https://fit.instructure.com/files/43817541/download?download_frd=1), [CHE4567hw5.zip](https://fit.instructure.com/files/43817545/download?download_frd=1), [CHE4567hw6.zip](https://fit.instructure.com/files/43817547/download?download_frd=1)

7, 8, 9 [CHE4567hw7.zip](https://fit.instructure.com/files/43817549/download?download_frd=1), [CHE4567hw8.zip](https://fit.instructure.com/files/43817551/download?download_frd=1), [CHE4567hw9.zip](https://fit.instructure.com/files/43817553/download?download_frd=1)

10, 11, 12 [CHE4567hw10.zip](https://fit.instructure.com/files/43817555/download?download_frd=1), [CHE4567hw11.zip](https://fit.instructure.com/files/43817543/download?download_frd=1), [CHE4567hw12.zip](https://fit.instructure.com/files/43817557/download?download_frd=1)

13, 14 [CHE4567hw13.zip](https://fit.instructure.com/files/43817559/download?download_frd=1), [CHE4567hw14.zip](https://fit.instructure.com/files/43817561/download?download_frd=1)

Exam 1 [nanotechnologymidterms21.docx](https://fit.instructure.com/files/43528457/download?download_frd=1) [nanotechnologymidterms21takehome.docx](https://fit.instructure.com/files/43528453/download?download_frd=1)

[che45675567exam1s21CMCquestion.xlsx](https://fit.instructure.com/files/43524579/download?download_frd=1) [CHE4567Exam1QandIABETbestavgpoor.zip](https://fit.instructure.com/files/43504403/download?download_frd=1)

[BMENanotechnologyExam1QandIABETbestavgpoor.zip](https://fit.instructure.com/files/43504401/download?download_frd=1)

[CHE4567Exam1ExcelDataFitABETbestavgpoor.zip](https://fit.instructure.com/files/43504405/download?download_frd=1)

[BMENanotechnologyExam1ExcelDataFitABETbestavgpoor.zip](https://fit.instructure.com/files/43504397/download?download_frd=1)

[CHE4567Exam1InClassABETbestavgpoor.zip](https://fit.instructure.com/files/43504407/download?download_frd=1)

[BMENanotechnologyExam1InClassABETbestavgpoor.zip](https://fit.instructure.com/files/43504399/download?download_frd=1)

Final Presentation rubric for presentations + grad student reports = [che5567evalproject.xls](https://fit.instructure.com/files/43517451/download?download_frd=1)

[Links to all student presentations, grad student reports + evaluations of each](https://fit.instructure.com/files/43817563/download?download_frd=1)

[week15-5567-2021.mp4](https://fit.instructure.com/files/43813461/download?download_frd=1)

[week16wednesday-5567-2021.mp4](https://fit.instructure.com/files/43813481/download?download_frd=1)

[week16thursday-5567-2021.mp4](https://fit.instructure.com/files/43813471/download?download_frd=1)

Final Review Papers [Links to all student presentations, grad student reports + evaluations of each](https://fit.instructure.com/files/43817563/download?download_frd=1)

Professor Reflections

Homeworks: 1-14 [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 1

Exam 1 [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) pp. 1-3

Final Presentations [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 3

Final Review Papers (grad students): [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 3

Comparison of Student Performance to Desired Course Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 4

Comparison of Student Performance to Desired Program Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 5

**CHE/CHM 1091 - Nanotechnology Lab**

[Course Overview and Course Evaluation Summary](https://fit.instructure.com/files/43840721/download?download_frd=1) - pp. 11-12

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - p. 25 [Syllabus for Students](https://fit.instructure.com/files/43514781/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43840727/download?download_frd=1) - p. 26 [List of Course Outcomes](https://fit.instructure.com/files/43817337/download?download_frd=1) – pp. 1-2

[Entire Course Content](https://fit.instructure.com/files/43509683/download?download_frd=1)

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 3 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 3

In Class Participation Grades - 20% (These are assessed on a pass/fail basis regarding whether the

student was able to execute the experiment. All students consistently succeed.)

Quizzes - 40% (10% each)

Quiz Assignment .Zip Files with Best/Average/Poor Examples

1 [STM/AFM](https://fit.instructure.com/files/43515097/download?download_frd=1) Two students got withdraw & retract reversed. One

student thought a blinking red light on the AFM would be

OK.

2 [Ag-SH & Catalyst Synthesis](https://fit.instructure.com/files/43515101/download?download_frd=1) [CHE1091Quiz2.zip](file:///C:\Users\jbrenner\Downloads\chechm1091\Agalkanethiolquiz.zip)

3 [Au Sputter Coat / SEM](https://fit.instructure.com/files/43519763/download?download_frd=1) [CHE1091Quiz3.zip](../../Downloads/chechm1091/SEMsputtercoatingquiz.zip)

4 [Ag Nanoparticles Toxicity](https://fit.instructure.com/files/43816789/download?download_frd=1) All students got a 100.

Ethics Exercise (20%) [EthicsBackground.mp4](https://fit.instructure.com/files/43521759/download?download_frd=1)

[Ethics2021.mp4](https://fit.instructure.com/files/43549561/download?download_frd=1) in lieu of best/average/poor

Entrepreneurship Exercise (20%) [EntrepreneurshipBackground.mp4](https://fit.instructure.com/files/43521757/download?download_frd=1) [LiteratureSearch.mp4](https://fit.instructure.com/files/43519763/download?download_frd=1)

[Entrepreneurship Exercise Student Examples 2020.mp4](https://fit.instructure.com/files/43521755/download?download_frd=1)

[Entrepreneurship2021.mp4](https://fit.instructure.com/files/43640487/download?download_frd=1) in lieu of best/average/poor

Professor Reflections

In Class Experiments [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 11

Quizzes: 1, 2, 3, 4 [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 11

Ethics: [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 11

Entrepreneurship [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 11

Comparison of Student Performance to Desired Course Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 12

Comparison of Student Performance to Desired Program Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 12

**CHE 4563 - Materials Characterization Lab** (also listed under & 5291 - Special Topics in

ChE and BME 4050 & 5790 - Special Topics in BME)

[Course Overview and Course Evaluation Summary](https://fit.instructure.com/files/43840721/download?download_frd=1) - pp. 6-10

[ABET Syllabus](https://fit.instructure.com/files/43514769/download?download_frd=1) - pp. 10 [Syllabus for Students](https://fit.instructure.com/files/43816791/download?download_frd=1)

[Course Outcome <--> Accreditation matrix](https://fit.instructure.com/files/43840729/download?download_frd=1) - p. 11 [List of Course Outcomes](https://fit.instructure.com/files/43817337/download?download_frd=1) – pp. 6-7

[Lecture Notes with Audio](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 5 ["Live" Recorded Lectures](https://fit.instructure.com/files/43817331/download?download_frd=1) – p. 5

In Class Participation Grades (These are assessed on a pass/fail basis regarding whether the

student was able to execute the experiment, except for the two students out of 50 who

took the "online" version of this class. Work by the professor and teaching assistants for

each of the topics below are recorded in Panopto Recordings. Student work was, in some

cases, recorded as [semphotos.zip](https://fit.instructure.com/files/43504791/download?download_frd=1), [2020SEM.zip](https://fit.instructure.com/files/43504793/download?download_frd=1) and [TEM.zip](https://fit.instructure.com/files/43505089/download?download_frd=1))

[Videos for all experiments](https://fit.instructure.com/files/43819839/download?download_frd=1)

[Group Preproposal (for online students only)](https://fit.instructure.com/files/43504859/download?download_frd=1)

Homework # Assignment .Zip Files with Best/Average/Poor Examples

1 [Image Analysis/Particle Size](https://fit.instructure.com/files/43527895/download?download_frd=1) [CHE4563hw1ABETbestavgpoor.zip](https://fit.instructure.com/files/43831049/download?download_frd=1)

2 [Materials Selection Tools](https://fit.instructure.com/files/43527747/download?download_frd=1) [CHE4563hw2ABETbestavgpoor.zip](https://fit.instructure.com/files/43505087/download?download_frd=1)

3 [Basics of Spectroscopy](https://fit.instructure.com/files/43527747/download?download_frd=1) [CHE4563hw3ABETbestavgpoor.zip](https://fit.instructure.com/files/43505085/download?download_frd=1)

Exam 1 [SEM/TEM/STM/AFM](https://fit.instructure.com/files/43816793/download?download_frd=1) [CHE4563Exam1ABETbestavgpoor.zip](https://fit.instructure.com/files/43505083/download?download_frd=1)

[exam1.pptx](https://fit.instructure.com/files/43816795/download?download_frd=1)

Final Exam [finalexamquestions.zip](https://fit.instructure.com/files/43504789/download?download_frd=1) [CHE4563FinalExamABETbestavgpoor.zip](https://fit.instructure.com/files/43505079/download?download_frd=1)

[BME4050FinalExamABETbestavgpoor.zip](https://fit.instructure.com/files/43505081/download?download_frd=1)

Grad Project [CHE4563GradProject.zip](https://fit.instructure.com/files/43504855/download?download_frd=1)

Professor Reflections

Ability to Conduct Experiments [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 8

Homeworks: 1, 2, 3 [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 6

Exam 1 [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 6

Final Exam [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) pp. 7-8

Grad Project [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 8

Comparison of Student Performance to Desired Course Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 9

Comparison of Student Performance to Desired Program Outcomes [NanotechEvals.docx](https://fit.instructure.com/files/43840721/download?download_frd=1) p. 10