PREREQUISITES FOR ENROLLMENT IN THE FLIGHT PORTION OF THE COMMERCIAL PILOT COURSE: You must hold a private pilot certificate with an airplane category and single engine land rating and a medical certificate valid for at least third class privileges prior to enrolling in the flight portion of this course. You must also have an instrument airplane rating, or be concurrently enrolled in the University of Oklahoma Instrument Rating Course and earn your instrument airplane rating prior to completing this course.

COURSE OBJECTIVE: You will obtain the knowledge, skill and aeronautical experience to meet the requirements of 14 CFR, Section 141, Appendix D to earn a commercial pilot certificate with airplane single engine land rating.

COURSE POLICY:

At the discretion of the instructor, students who progress rapidly within a specific stage, may within reasonable variances, continue to the next lesson with less time than is specified in the specific lesson curriculum, provided all content and completion standards are satisfactorily completed. Stage V, lessons one and two each must be a minimum of three hours duration. For the rest of the lessons, the time stated in the lesson is the approximate minimum time that a student would need to meet the lesson objectives and completion standards; not absolute required times. The lesson time could be slightly more or slightly less. These reduced hours must be included in other lessons to complete the total ground or flight time specified by category in the training course outline in order to satisfactorily complete the course.

At no time will a student be allowed to continue to the next stage without having successfully completed all of the lessons and the required tests or stage checks related to the completion of the previous stage. Flight training for this course will be done in accordance with the F.A.A approved syllabus. Deviations from the syllabus due to student training requirements, weather related factors, or other items as necessary will be allowed as long as the following requirements are met:

- The deviation is approved by the chief or assistant chief flight instructor
- A notation will be made in the student training record as to the lesson covered and the reason for the deviation.
  - The student will complete all syllabus requirements before a graduation certificate is issued.

To satisfactorily complete the course of training, the student must meet all course objectives and completion standards. The student must complete the required ground training and pass the FAA Commercial Pilot Airplane Knowledge test prior to the completion of flight training.

EXPECTED ACCOMPLISHMENTS AND STANDARDS: To satisfactorily complete each Flight stage you must complete the lessons in that stage and pass the end of course stage check. Each lesson lists specific objectives and standards of completion.
CHECKS AND TESTS: The flight training portion of the syllabus contains a quiz and a stage check flight at the end of Stage IV, V and X. The stage checks will be administered by the Chief/Assistant Chief Flight Instructor or check instructor approved by the FSDO. The Stage X check is the end of course stage check which will be equal in scope, depth and difficulty to the practical test defined by the FAA Commercial Pilot – Airplane Airman Certification Standards.
## UNIVERSITY OF OKLAHOMA COMMERCIAL PILOT CERTIFICATION COURSE
### COMMERCIAL PILOT STAGE IV
#### LESSON TIME ALLOCATION

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**STAGE IV CHECK**

| TOTAL*** | 18.0 | 22.0 | 4.0 | 5.0** | 3.0 | 5.0 |

*These lessons should be done in the C-152. If the C-152 is not available they may be done in a PA28-161.

** By the completion of Stage X the student will have completed 10 solo takeoffs and landings at night (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

***Any shortages in a category must be made up in Stages V and X.

DUAL XC = Dual Cross Country  
SOLO XC = Solo Cross Country  
INST DUAL = Instrument  
TAA = Technically Advanced Aircraft
UNIVERSITY OF OKLAHOMA STAGE IV

STAGE OBJECTIVE

Stage IV provides instruction and practice in maneuvers required by the Commercial Pilot Airman Certification Standards. Increased experience and proficiency in night and cross country operations is also included.

STAGE COMPLETION STANDARD

At the completion of this stage, the student will demonstrate proficiency in the maneuvers listed in the Stage Check Lesson (lesson 27).

Note: Technically Advanced Aircraft (TAA) meet the requirements of 14CFR 61.129(j)
STAGE IV FLIGHT LESSON 1 – DUAL - LOCAL

LESSON OBJECTIVE:
During this lesson, the student is provided with a review of basic flight procedures along with the introduction and practice of emergency procedures, and takeoffs and landings in the PA 28-161 aircraft.

CONTENT:
Lesson Review
Preflight Preparations and Procedures
  - Visual Inspection
  - Determining Performance and Limitations
Takeoffs and Landings
  - Normal
  - Go-Around From Rejected (Balked) Landing
Power Settings and Mixture Leaning
Use of Flaps
Climbs
Descents
Steep Turns
Post Flight Procedures

Lesson Introduction
Maneuvering During Slow Flight
Stalls
  - Power-Off
  - Power-On
Takeoffs and Landings
  - Short-Field
  - Soft-Field
Simulated Emergency Procedures
  - Emergency Descent
  - Emergency Approach and Landing
  - System and Equipment Malfunctions
  - Fire in Flight

COMPLETION STANDARDS:
At the completion of this lesson, the student should be thoroughly familiar with the flight characteristics, systems, and emergency procedures associated with the airplane. The student will meet the standards in the Private Pilot Airman Certification Standards.
LESSON OBJECTIVE:
This lesson will provide solo experience to allow the student to increase familiarity with the PA 28-161 and its systems.

CONTENT:
Lesson Review
Visual Inspection
Cruise Procedures
Power Settings and Mixture Leaning
Climbs
Descents
Steep Turns
 Maneuvering During Slow Flight
Stalls
 - Power-Off
 - Power-On
Takeoffs and Landings
 - Short-Field
 - Soft-Field

COMPLETION STANDARDS:
This lesson will be complete when the student has conducted the assigned flight. During the flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the airplane. The tasks will be performed to the standards of the Private Pilot Airman Certification Standards.
STAGE IV FLIGHT LESSON 3 – DUAL - LOCAL

LESSON OBJECTIVE:
This lesson provides a review of basic ground reference maneuvers, S-turns, turns around a point and rectangular course. Slow flight and emergency procedures are also reviewed. Steep turns and chandelles are introduced to begin developing precise airplane control when operating near the performance limits of the airplane. In addition, accelerated stalls are introduced.

CONTENT:
Lesson Review
Private Pilot Ground Reference Maneuvers Assigned by the Instructor
- S-Turns
- Turns Around a Point
- Rectangular Course
Maneuvering During Slow Flight
Simulated Emergency Procedures
- Emergency Descent
- Emergency Approach and Landing
- System and Equipment Malfunctions

Lesson Introduction
- Steep Turns
- Chandelles
- Accelerated Stalls
- Steep Spiral

COMPLETION STANDARDS:
The lesson is complete when the student can perform the maneuvers in Lesson Review to the standards listed in the Private Pilot Airman Certification standards. The student will display the correct understanding of the necessary control inputs during entry to, performance of, and recovery from steep turns, chandelles and steep spirals. The student also will display the knowledge of the cause and recovery from accelerated stalls.

STUDENT NAME ___________________________ ID# __________
INSTRUCTOR NAME ________________________ CERT# __________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 403
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION______
HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: ____________________________
FOR U OR I: SUBJECTS THAT ARE NOT COMPLETE/INSTRUCTOR COMMENTS

FOR XC FLIGHTS, LIST DESTINATIONS: ________________________________

DATE: __________________ ENTERED BY __________________
TIME: IN ____________ INVOICE _____ FLIGHT REC _____
          OUT ____________ SYLL. LESSON ____________
          TOTAL ____________ PROCESSED ON ____________
HOBBS / TAC: IN ________ / ________ REMARKS: __________________
          OUT ________ / ________
          TOTAL TIME __________________
STUDENT SIGNATURE ____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
LESSON OBJECTIVE:
The student will attempt to gain proficiency through the review of the listed maneuvers.

CONTENT:
Lesson Review
- Steep Turns
- Chandelles
- Maneuvering During Slow Flight
- Short-Field Takeoffs and Landings
- Soft-Field Takeoffs and Landings
- Power-Off Stalls
- Power-On Stalls
- Steep Spiral

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned flight. During the lesson, the student should attempt to minimize the transition and setup time between each maneuver.
LESSON OBJECTIVE:
The purpose of this lesson will be to increase the student's planning and coordination and introduce short and soft field takeoffs and landings, the power-off 180 degree accuracy approach and landing and the steep spiral.

CONTENT:
Lesson Review
- Steep Turns
- Chandelles
- Stalls
- Collision Avoidance

Lesson Introduction
- Maximum Performance (Short-Field) Takeoff and Climb
- Soft-Field Takeoff and Climb
- Short-Field Approach and Landing
- Soft-Field Approach and Landing
- Power Off 180 Degree Accuracy Approach and Landing
- Steep Spiral

COMPLETION STANDARDS:
The student will perform the tasks above to the standards of the Commercial Pilot Airman Certification Standards with the following exceptions:
- Steep Turns: Altitude +/- 200 feet, roll out heading +/- 20 degrees
- Chandelles: Roll out heading +/- 15 degrees
- Short Field Landing: Touchdown point -0 +150 feet
- Power off Accuracy Landing: Touchdown point -0 +400 feet
- Steep Spirals: Airspeed +/- 15 knots

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # _CRM_ FLIGHT _STAGE # _IV_ LESSON # _405_
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: __________________________________________________________

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OUT ____________ SYLL. LESSON ____________
TOTAL ____________ PROCESSED ON ____________

HOBBS / TAC: IN _______/_______ REMARKS: ______________________
OUT _______/_______
TOTAL TIME _______________________________________
STUDENT SIGNATURE _________________________________________
INSTRUCTOR SIGNATURE ______________________________________
STAGE IV FLIGHT LESSON 6 – SOLO - LOCAL

LESSON OBJECTIVE:
The following lesson provides the student with the opportunity to review the listed flight maneuvers to increase proficiency.

CONTENT:
Lesson Review
- Steep Turns
- Chandelles
- Steep Spiral
- Short-Field Takeoffs and Landings
- Soft-Field Takeoffs and Landings

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned solo flight. During the lesson, the student should attempt to gain proficiency in the listed maneuvers.

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 406
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_____
HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: __________________________________________________________
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FOR XC FLIGHTS, LIST DESTINATIONS: ________________________________

DATE: ____________________ ENTERED BY ____________________
TIME: IN ________________ INVOICE _____ FLIGHT REC _____
              OUT ______________ SYLL. LESSON ______________
              TOTAL ____________ PROCESSED ON ____________
HOBB / TAC: IN ______/_______ REMARKS: ____________________
              OUT ______/_______
              TOTAL TIME __________________
STUDENT SIGNATURE ____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE IV FLIGHT LESSON 7 – DUAL - LOCAL

LESSON OBJECTIVE:
This lesson provides a review and evaluation of the student's progress during the previous solo lessons.

CONTENT:
Lesson Review
- Chandelles
- Normal Takeoffs and Landings
- Power Off 180 Degree Accuracy Approach and Landing
- Crosswind Takeoffs and Landings
- Wake Turbulence Avoidance

Lesson Introduction
- Lazy Eights
- Eights-On-Pylons

COMPLETION STANDARDS:
The student will perform the tasks to the standards of the Commercial Pilot Airman Certification Standards with the following exceptions:
Chandelles: Roll out heading +/- 15 degrees
Power Off Accuracy Landings: Touchdown point -0 +400 feet
Lazy Eights: 180 degree point altitude/airspeed within 200 feet/15 knots of entry Altitude/airspeed
Eights on Pylons: Pylons maintained within one wing width

UNIVERSITY OF OKLAHOMA

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 407

SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: __________________________________________________________

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FOR XC FLIGHTS, LIST DESTINATIONS: _________________________________

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OUT ________________ SYLL. LESSON ________________
TOTAL ________________ PROCESSED ON __________________

HOBBS / TAC: IN _______/__________ REMARKS: __________________
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TOTAL TIME ________________ __________________________

STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
STAGE IV FLIGHT LESSON 8 – SOLO - LOCAL

LESSON OBJECTIVE:
The student is provided with the opportunity to review and practice flight maneuvers to gain added proficiency.

CONTENT:
Lesson Review
- Power-Off Stalls
- Power-On Stalls
- Maneuvering During Slow Flight
- Steep Turns
- Chandelles
- Lazy Eights
- Steep Spiral
- Eights-On-Pylons
- Short-Field Takeoffs and Landings
- Soft-Field Takeoffs and Landings

COMPLETION STANDARDS:
This lesson will be completed when the student has conducted the assigned solo flight. During flight, the student should attempt to increase accuracy and coordination on the listed maneuvers.

UNIVERSITY OF OKLAHOMA
STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # _CRM_ FLIGHT _STAGE # IV _LESSON # 408_
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_____

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.

REMARKS: __________________________________________________________

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HOBBS / TAC: IN _______/_________ REMARKS: ______________
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STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________

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OUT _______________ SYLL. LESSON ________________
TOTAL _______________ PROCESSED ON ______________

HOBBS / TAC: IN _______/_________ REMARKS: ______________
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TOTAL TIME ________________________________

STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
STAGE IV FLIGHT LESSON 9 – DUAL - LOCAL

LESSON OBJECTIVE:
The objective of this lesson is to determine the student's preparedness for the stage check and correct any areas of faulty performance.

CONTENT:
Lesson Review
- Systems and Equipment Malfunctions
- Lazy Eights
- Chandelles
- Steep Turns
- Steep Spiral
- Eights-On-Pylons
- Flight at Slow Airspeeds with Realistic Distractions
- Power On Stalls
- Power Off Stalls
- Accelerated Stalls
- Power Off 180 Degree Accuracy Approach and Landing

COMPLETION STANDARDS:
The student will perform the tasks to the standards of the Commercial Pilot Airman Certification Standards with the following exceptions:
Lazy Eights: 180 degree point altitude/airspeed within 200 feet/15 knots of entry altitude/airspeed
Steep Turns: Altitude +/- 150 feet Roll out heading +/- 15 degrees
Steep Spiral: Airspeed +/- 15 knots
Eights on Pylons: Pylons maintained within one wing span
Power Off Accuracy Landing: Touch down point -0 +300 feet

UNIVERSITY OF OKLAHOMA
STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 409
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION______
HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: __________________________________________________________
FOR U OR I: SUBJECTS THAT ARE NOT COMPLETE/INSTRUCTOR COMMENTS
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FOR XC FLIGHTS, LIST DESTINATIONS: _________________________________
DATE: __________________ ENTERED BY __________________
TIME: IN ____________ INVOICE ____________ FLIGHT REC ____________
       OUT ____________ SYLL. LESSON ____________
       TOTAL ____________ PROCESSED ON ____________
HOBBBS / TAC: IN ________/_______ REMARKS: _________________________
       OUT ________/_______
       TOTAL TIME ______________________________
STUDENT SIGNATURE ______________________________
INSTRUCTOR SIGNATURE ______________________________
STAGE IV FLIGHT LESSON 10 – SOLO - LOCAL

LESSON OBJECTIVE:
This flight is a solo review lesson designed to increase the student's proficiency.

CONTENT:
Lesson Review
- Lazy Eights
- Eights-On-Pylons
- Chandelles
- Steep Turns
- Steep Spiral
- Takeoffs and Landings
  - Normal
  - Crosswind
- Maneuvering During Slow Flight

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned solo flight. During the flight, the student should attempt to perform lazy eights with symmetrical loops and eights-on-pylons, chandelles, and steep turns with smoothness and coordination. In executing the steep spiral the student should attempt to adjust bank angle to maintain a constant distance from the selected point and adjust pitch to maintain a constant airspeed.
STAGE IV FLIGHT LESSON 11 – DUAL - LOCAL, NIGHT

LESSON OBJECTIVE:
This lesson introduces the student to night flight operations and the differences encountered between day and night flight.

CONTENT:
Lesson Introduction
Night Ground Operations
  - Aeromedical Factors
  - Personal Equipment Recommended
  - Night Flight Preparation
  - Night Preflight Inspections

Airport and Runway Markings and Lighting

Takeoffs and Landings
  - Normal
  - Crosswind

Stalls
  - Power-Off
  - Power-On

Maneuvering During Slow Flight

Steep Turns

Simulated Emergency Procedures
  - Emergency Approach and Landing (Simulated)
  - Systems and Equipment Malfunctions

Go-Around From Rejected (Balked) Landing

COMPLETION STANDARDS:
This lesson is complete when the student can apply the knowledge and risk management standards of the Night Operations Task of the Private Pilot Airman Certification Standards. Execution of the maneuvers, takeoffs/landings and emergency procedures tasks will meet the standards of the Commercial Pilot Airman Certification Standards with the following exception:

Steep Turns: Altitude +/- 200 feet, roll out heading +/-20 degrees
STAGE IV FLIGHT LESSON 12 – SOLO - LOCAL, NIGHT

LESSON OBJECTIVE:
This lesson provides night solo practice so the student may gain proficiency and confidence in the night environment.

CONTENT:
Lesson Review
Maneuvering During Slow Flight
Steep Turns
Takeoffs and Landings to a full stop
  - Normal
  - Crosswind
  - Controlled Airports
  - UnControlled Airports

COMPLETION STANDARDS:
This lesson is complete when the student has conducted solo night flight. During the flight, the student should attempt to gain proficiency in takeoffs and landings in the night environment. See NOTE in stage X lesson 12.
STAGE IV FLIGHT LESSON 13 – DUAL - LOCAL

LESSON OBJECTIVE:
The objective of Lesson 13 is to review ground and flight operations listed.

CONTENT:

Lesson Review

Ground Operations
- Certificates and Documents
- Operation of Airplane Systems
- Determining Performance and Limitations
- Use of Checklists
- Cockpit Management
- Visual Inspection
- Engine Starting
- Taxiing
- Pretakeoff Check

Takeoffs and Landings
- Normal
- Crosswind

Climbs and Descents

Steep Turns

Go-Around From Rejected (Balked) Landing

After-Landing Procedures

COMPLETION STANDARDS:

At the completion of the flight, the student should display a working knowledge of airplane systems. Additionally, the student should perform the operations listed to the standards of the Commercial Pilot Airman Certification Standards with the following exception:

Steep Turns: Altitude +/- 150 feet, roll out heading +/- 15 degrees
STAGE IV FLIGHT LESSON 14 – DUAL - LOCAL

LESSON OBJECTIVE:
During this lesson, the student is provided with a review of listed flight procedures and emergency procedures and takeoffs and landings.

CONTENT:
Lesson Review
Visual Inspection
Determining Performance and Limitations
Takeoffs and Landings
  - Normal
  - Go-Around From Rejected (Balked) Landing
Climbs
Descents
Steep Turns

Maneuvering During Slow Flight

Stalls
  - Power-Off
  - Power-On
  - Accelerated

Takeoffs and Landings
  - Short-Field
  - Soft-Field

Simulated Emergency Procedures
  - Emergency Descent
  - Emergency Approach and Landing
  - System and Equipment Malfunctions
  - Fire in Flight

COMPLETION STANDARDS:
At the completion of the flight, the student will perform the listed tasks to the standards of the Commercial Pilot Airman Certification Standards.
STAGE IV FLIGHT LESSON 15 – SOLO - LOCAL

LESSON OBJECTIVE:
This lesson provides solo practice of the flight maneuvers so that the student can acquire added proficiency.

CONTENT:
Lesson Review
Steep Turns
Chandelles
Lazy Eights
Steep Spiral
Eights-On-Pylons
Takeoffs and Landings
  - Short-Field
  - Soft-Field
  - Crosswind

COMPLETION STANDARDS:
The solo lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to attain or maintain commercial pilot proficiency.
STAGE IV FLIGHT LESSON 16 – DUAL - CROSS-COUNTRY, NIGHT

LEsson ObJectiVe:
This lesson is a review and evaluation of the student's cross-country skills. The flight will include a landing at a point more than 100 n.m. from the original departure point.

contENt:
Lesson Introduction
Cross-Country Ground Operations
- Cross-Country Preflight Planning
- Obtaining Weather Information
- Cockpit Management
Navigation
- Piloting
- Dead Reckoning
- VOR Navigation
- GPS Navigation
- Use of Radar Vectors
Cruise Procedures
Power Settings and Mixture Leaning
Radio Communications and ATC Light Signals
Simulated Emergency Procedures
- System and Equipment Malfunctions
- Low Fuel Supply
- Lost Procedures
- Turbulence
- Adverse Weather
- Airframe and Powerplant Icing
- Planning to Alternate
- Radio and Instrument Failure
Unfamiliar Airports
- Traffic Patterns
- FSS Field
- UNICOM-Equipped Field
- Tower-Controlled Field
- Operations in Heavy Traffic
- CTAF Procedures
- Airport and Runway Markings and Lighting
High Density Altitude Operations
Radio Facility Shutdowns

completiOn StandArds:
This lesson is complete when the student performs the listed tasks to the standards of the Commercial Pilot Airman Certification Standards
STAGE IV FLIGHT LESSON 17 – SOLO - CROSS-COUNTRY, NIGHT

LESSON OBJECTIVE:
This and the following solo cross-country flight are provided to develop the student's cross-country proficiency and confidence. This flight will include a landing at a point more than 50 n.m. from the original departure point and shall incorporate night operations into the cross-country procedures. All landings should involve a traffic pattern at an airport.

CONTENT:
Lesson Review
Cross-Country Ground Operations
  - Preflight Planning
Cross-Country Flight Assigned by the Instructor
  - Dead Reckoning
  - Pilotage
  - VOR Navigation
  - GPS Navigation
  - Use of Tower-Controlled Airport

COMPLETION STANDARDS:
The student will show added skill in cross-country planning by selecting optimum cruising altitudes and appropriate checkpoints for a flight with a landing at a point more than 50 n.m. from the original departure point. Additionally, fuel planning will be accurate and allow for an adequate reserve. See NOTE in stage X lesson 12.

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # CRM ________________________________
FLIGHT STAGE # IV LESSON # 417
SAT ____%  UNSAT ____%  INCOMPLETE ____%  CANCELLATION_____

HOMWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note: 1. Circle appropriate status/grade and put number (%) grade on line.
   2. If cancellation state reason.
REMARKS: __________________________________________________________
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      TOTAL _______________ PROCESSED ON __________________

HOBB'S / TAC: IN _______/__________ REMARKS: ______________________
               OUT _______/__________
               TOTAL TIME ________________

STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
STAGE IV FLIGHT LESSON 18 – SOLO - CROSS-COUNTRY

LESSON OBJECTIVE:
This lesson develops student proficiency in cross-country flights in an unfamiliar area. The flight will include a landing at a point more than 50 n.m. from the original departure point.

CONTENT:
Lesson Review
Cross-Country Ground Operations
Cross-Country Flight Assigned by the Instructor
- Dead Reckoning
- Pilotage
- VOR Navigation
- GPS Navigation
- Use of Tower-Controlled Airport
- Use of UNICOM-Equipped Airport

COMPLETION STANDARDS:
This lesson is complete when the student has conducted a solo cross-country to include a landing at a point more than 50 n.m. from the original departure point. The student should attempt to gain proficiency in cross-country operations and the use of unfamiliar airports.
STAGE IV FLIGHT LESSON 19 – DUAL - LOCAL

LESSON OBJECTIVE:
During this lesson, the student is provided with a review of basic flight procedures along with the introduction and practice of emergency procedures, attitude instrument flying, and takeoffs and landings in the complex aircraft. In addition, this lesson will provide the student with the necessary proficiency to solo or act as pilot in command in the aircraft safely.

CONTENT:

Lesson Review

Visual Inspection
Determining Performance and Limitations
Takeoffs and Landings
  - Normal
  - Go-Around From Rejected (Balked) Landing
Climbs
Descents
Stall
  - Power-Off
  - Power-On
  - Accelerated
Takeoffs and Landings
  - Short-Field
  - Soft-Field
Simulated Emergency Procedures
  - Emergency Descent
  - Emergency Approach and Landing
  - System and Equipment Malfunctions
  - Fire in Flight
Maneuvering During Slow Flight

COMPLETION STANDARDS:

At the completion of this flight, the student will perform the listed tasks to the standards of the Commercial Pilot Airman Certification Standards.
STAGE IV FLIGHT LESSON 20 – DUAL

LESSON OBJECTIVE:
This lesson is a review and evaluation session. Here, the student will be asked to perform selected VFR precision flight maneuvers. The objective is to determine the student's VFR proficiency.

CONTENT:
Lesson Review
Ground Operations
- Certificates and Documents
- Determining Performance and Limitations
- Operation of Airplane Systems
- Visual Inspection
- Cockpit Management

Takeoffs and Landings
- Normal
- Crosswind
- Go-Around From Rejected (Balked) Landing
- Power Off 180 Degree Accuracy Approach and Landing
- After-Landing Procedures

Stalls
- Power-Off
- Power-On
- Accelerated

Cruise Procedures
Power Settings and Mixture Leaning
Constant-Speed Propeller Operations
- Effects on Aircraft Performance
Simulated Emergency Procedures
- System and Equipment Malfunctions
- Fire in Flight

COMPLETION STANDARDS:
At the completion of this flight, the student should be thoroughly familiar with the flight characteristics, systems, and emergency procedures associated with the airplane. The listed tasks will be performed to the standards of the Commercial Pilot Airman Certification Standards with the following exception:

Power Off Accuracy Landing: Touch down point -0 +300 feet

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# __________________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 420
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.

REMARKS: __________________________________________________________

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OUT ___________ SYLL. LESSON ___________
TOTAL ___________ PROCESSED ON ___________

HOBBS / TAC: IN _______/__________ REMARKS:_____________________
OUT _______/__________
TOTAL TIME _____________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE IV FLIGHT LESSON 21 – SOLO - LOCAL, NIGHT

LESSON OBJECTIVE:
The object of this lesson is to increase the student proficiency in night operations. Night flight procedures, therefore, are reviewed and practiced in this session.

CONTENT:
Lesson Review
- Steep Turns
- Maneuvering During Slow Flight
- Takeoffs and Landings

COMPLETION STANDARDS:
The student's increase in night proficiency to that of a commercial pilot will be evident during the postflight evaluation. The student will thoroughly explain the additional operational aspects and safety considerations which are associated with night flight. See NOTE in stage X lesson 12.
STAGE IV FLIGHT LESSON 22 – DUAL

LESSON OBJECTIVE:
This lesson is to determine the student's ability to fly commercial maneuvers.

CONTENT:
Lesson Review
Chandelles
Eights-On-Pylons
Steep Turns
Stalls
Maneuvering During Slow Flight
Lazy Eights
Steep Spirals
Takeoffs and Climbs
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
Approaches and Landings
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
  - Go-Around From Rejected (Balked) Landing
After Landing Procedures

COMPLETION STANDARDS:
The student will perform the tasks to the standards of the Commercial Pilot Airman Certification Standards with the following exceptions:

Lazy Eights: 180 degree altitude/airspeed within 150 feet/15 knots of entry altitude/airspeed

STUDENT NAME ___________________________________ ID# ____________________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT #  CRM FLIGHT STAGE # IV LESSON # 422
SAT _____%  UNSAT _____%  INCOMPLETE ____%  CANCELLATION_______
HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: __________________________________________________________
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      OUT _______________ SYLL. LESSON _______________
      TOTAL _______________ PROCESSED ON _______________
HOBBSS / TAC: IN _______/_______ REMARKS: ______________________
               OUT _______/_______
               TOTAL TIME ___________________________
STUDENT SIGNATURE ____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE IV FLIGHT LESSON 23 – SOLO - LOCAL

LESSON OBJECTIVE:
This lesson provides solo practice of the flight maneuvers so that the student can acquire added proficiency.

CONTENT:
Lesson Review
Lazy Eights
Chandelles
Eights-On-Pylons
Steep Spiral
Takeoffs and Landings
- Short-Field
- Soft-Field
- Crosswind

COMPLETION STANDARDS:
The solo lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to attain or maintain commercial pilot proficiency.

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# _______________
AIRCRAFT # CRM FLIGHT STAGE # IV LESSON # 423
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_____

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.

FOR U OR I: SUBJECTS THAT ARE NOT COMPLETE/INSTRUCTOR COMMENTS
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FOR XC FLIGHTS, LIST DESTINATIONS: _______________________________________

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DATE: __________________ ENTERED BY __________________
TIME: IN _____________ INVOICE _____ FLIGHT REC____
OUT _____________ SYLL. LESSON _____________
TOTAL _____________ PROCESSED ON _____________

HOBBS / TAC: IN _______/_______ REMARKS: __________________
OUT _______/_______ __________________________
TOTAL TIME ______________________________

STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
LESSON OBJECTIVE:
This lesson presents additional instruction in the chandelle, steep power turn, and steep spiral. Maximum performance takeoffs and landings are practiced to increase the student's proficiency in the takeoff and landing phases of flight.

CONTENT:
Lesson Review
Steep Turns
Chandelles
Steep Spiral
Traffic Patterns
Maximum Performance (Short-Field) Takeoff and Climb
Soft-Field Takeoff and Climb
Short-Field Approach and Landing
Soft-Field Approach and Landing

COMPLETION STANDARDS:
The student will perform the tasks to the standards of the Commercial Pilot Airman Certification Standards
STAGE IV FLIGHT LESSON 25 – SOLO - LOCAL

LESSON OBJECTIVE:
This lesson provides solo practice of the flight maneuvers so that the student can acquire added proficiency.

CONTENT:
Lesson Review
Steep Turns
Chandelles
Steep Spiral
Eights On Pylons
Steep Spiral
Takeoffs and Landings
  - Short-Field
  - Soft-Field
  - Crosswind

COMPLETION STANDARDS:
The solo lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to attain or maintain commercial pilot proficiency.
STAGE IV LESSON 26 – QUIZ

LESSON OBJECTIVE:
The students knowledge of the maneuvers covered in this stage will be evaluated through a quiz.

CONTENT: The quiz will cover the following areas:
- Slow Flight and Stalls
- Landings – Short Field, Soft Field and 180 degree Power-Off Accuracy
- Maneuvers – Steep Turns, Chandelles, Steep Spirals, Lazy 8’s and 8’s on Pylons

COMPLETION STANDARDS:
The student should score at least 70% on the quiz. In addition, the instructor will review those questions missed with the student.
STAGE IV FLIGHT LESSON 27 – DUAL STAGE CHECK, VFR

LESSON OBJECTIVE:
This lesson is conducted by the chief instructor or assistant chief instructor or check instructor to determine the student's ability to fly the designated commercial maneuvers below.

CONTENT:

Lesson Review

Chandelles
Eights-On-Pylons
Steep Turns
Stalls
  - Power-On
  - Power-Off
  - Accelerated

Maneuvering During Slow Flight
Steep Spiral
Takeoffs and Climbs
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
Approaches and Landings
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
  - Go-Around From Rejected (Balked) Landing
After Landing Procedures

COMPLETION STANDARDS:
The student will perform the flight maneuvers listed above in a PA28-161 to Commercial Pilot Airman Certification Standards with the following exceptions.

Eights on Pylons: Holds pylon plus or minus one wind width using appropriate pivotal altitude avoiding slips and skids.